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COMMUNICATIONS.

A NEW METHOD OF TREATMENT IN DEEP ULCERS OF THE CORNEA.

BY M. LANDESBURG, M. D.,
Of Philadelphia.

The treatment ordinarily employed in deep ulcers of the cornea (suppurative keratitis—keratitis with hypopyon) chiefly consists in the use of atropia, hot poultices, and eventually in the application of compressive bandages on both eyes. In instances of keratitis with large hypopyon paracentesis is frequently made, in order to let off the exudation from the anterior chamber. In this form of deep ulceration of the cornea, which is commonly known as "serpent ulcer," the section of the cornea is performed, if the above-mentioned therapeutic measures have failed to check the progress of this morbid process. This surgical proceeding, which has been introduced by Saemisch into the oculistic therapeutics, consists in splitting the bottom of the ulcer by means of Von Graefe's knife. Lately, the treatment with iodoform has been tried extensively in deep ulcers of the cornea, and the German oculists speak very favorably of this new method, especially in instances of "serpent ulcers," which praises, however, I am not able to corroborate by my own experience.

But, whichever method of treatment is resorted to, the course of the latter always proves to be a tedious and protracted one, which confines the sufferer for the most time to his room or bed, requiring of both the patient and the physician the greatest patience and perseverance. And in spite

of this trouble and annoyance, the results of the treatment with either method have been far from answering even the most modest expectations. Total losses in a certain percentage of instances are an unavoidable fatality; dense opacities of the cornea are of common occurrence, and iridectomy remains the last resort in many cases to restore to the affected eye a certain amount of vision.

These sad experiences in the treatment of deep ulcers of the cornea I have shared with all the other followers of our special profession. But the aspect changed entirely from the time I began to use methodically instillations of eserine in this affection. Outdoor treatment in the practice of the poor became the rule, from which I have not had to deviate in one single instance. The treatment itself became simplified, and its duration shortened to half the time it had taken under the old method. And—which concerns us the most—the results of the new departure have been favorable more than any other method of treatment can boast of. Staphyloma and total adherent leucoma have not been observed in any case which was admitted for treatment, and dense opacities of the cornea, with or without anterior synechiæ, have occurred only in such cases which came under my treatment either with protrusion of the membrane of Descemet (keratocele), or with perforation of the cornea—all other cases treated with such a smooth, circumscribed opacity and with such a favorable condition of vision, that the necessity for iridectomy has become very rare. This marvelous change for the better in the issue of the treatment in one of the most severe affections of the cornea, I exclusively owe to the use of eserine. The progress of the morbid process is generally

checked after the remedy has taken full effect, which usually occurs within twenty-four hours. The symptoms of inflammation and irritation gradually subside, and the affection henceforth remains under control, although the course of healing may not always run altogether smoothly. There are oscillations and relapses, especially in "serpent ulcer," but the tendency in the whole is one towards recovery. The use of eserine is continued until the reparation of the destroyed tissue has been completed, when it is replaced by the application of stimulant ointments, as oleate of mercury, or oleate of iodoform, in order to clear up, as far as possible, the remaining opacities. And I have to say, that by the use of the latter remedies I have frequently been able to establish a certain pellucidity and transparency even in the most dense opacities of the cornea. Besides eserine, I consider the application of hot fomentations an essential part of the treatment, which greatly facilitates the repair of the destroyed tissue. But I must confess that I have seen good recoveries taking place in many instances in which my directions in regard to hot fomentations have not been attended to very scrupulously. The diseased eye is protected against injurious influences by a simple bandage, which can easily be removed and applied again by the patient himself. I have ordered all my dispensary patients to keep quietly at home during the time of their trouble; but I know but too well that only few of them were in the position and of the disposition to live according to my advice, and that many were obliged to continue their usual daily work (as rag-picking, washing, peddling, etc.), in order to make a living.

In the first years of my experiments with eserine I have frequently performed paracentesis of the cornea in instances with marked development of hypopyon. But for the last two years I have entirely abandoned the operation, having learned by experience that spontaneous absorption of the exudation in the anterior chamber does not in the least interfere with the course of the healing process.

The new method of treatment I have tried in the last six years with 122 dispensary patients. Of these, 75 were suffering from deep ulcers and 47 from serpent ulcers of the cornea.

Of the 75 cases with deep ulcers of the cornea, there were 53 men, 15 women, and 7 children. Both eyes were affected in three men and in one child.

The first examination showed the following condition:

Small hypopyon in 7 patients.

Medium large hypopyon in 16 patients.

Very large hypopyon in 11 patients.

In these instances there was:

Keratocoele in 11 patients.

Perforation of the cornea with prolapse of iris in 9 patients.

The following complications were present:

Stricture of the lachrymal sac in 8 patients.

Dacro cysto blenorrhoea in 13 patients.

Ectropion in 3 patients.

Paralytic lagophthalmus in 2 patients.

Exophthalmus consequent upon Basedow's disease in 1 patient.

The final issue was:

1. *Nubecula of the cornea* in 35 patients, with the following vision:

$\frac{3}{60}$ in 9 patients.

$\frac{1}{30}$ in 11 patients.

$\frac{1}{60}$ in 9 patients.

$\frac{1}{30}$ in 5 patients.

$\frac{1}{60}$ in 1 patient.

2. *Central cicatrix of the cornea* in 27 patients, with the following vision:

$\frac{1}{30}$ in 7 patients.

$\frac{1}{60}$ in 11 patients.

$\frac{1}{60}$ in 6 patients.

$\frac{1}{60}$ in 3 patients.

3. *Circumscribed macula of the cornea with anterior synechie* in 7 patients, with the following vision, 6 of whom after iridectomy:

$\frac{1}{30}$ in 2 patients.

$\frac{1}{60}$ in 1 patient.

$\frac{1}{60}$ in 3 patients.

$\frac{1}{60}$ in 1 patient, who refused iridectomy.

4. *Adherent leucoma of the cornea* in 6 patients, with the following vision, after iridectomy:

$\frac{1}{30}$ in 3 patients.

$\frac{1}{60}$ in 2 patients.

$\frac{1}{60}$ in 1 patient.

In 23 patients who came under my notice in the progressed stages of the affection, other methods of treatment had been used without the least avail.

Of the 47 cases of serpent ulcers of the cornea there were 34 men, 11 women, and two children. The affection was one-sided in all instances. Seventeen patients presented themselves in the first stages of the affection. Hypopyon was ascertained in 25 patients, viz.:

Small hypopyon in 7 patients.

Medium large hypopyon in 9 patients.

Very large hypopyon in 9 patients.

Of these instances, 7 patients showed keratocoele and 5 perforation of the cornea with prolapse of the iris.

The following complications were present :

Stricture of the lachrymal duct in 11 patients.

Dacryo cysto blennorrhœa in 5 patients.

Ectropion of the lower lid in 1 patient.

The final issue was :

1. *Nubecula of the cornea* in 29 patients, with the following vision :

$\frac{1}{12}$ in 13 patients.

$\frac{1}{10}$ in 10 patients.

$\frac{1}{6}$ in 6 patients.

2. *Macula of the cornea* in 9 patients, with the following vision :

$\frac{1}{10}$ in 4 patients.

$\frac{1}{8}$ in 3 patients.

$\frac{1}{6}$ in 2 patients.

3. *Circumscribed macula of the cornea with anterior synechia* in 6 patients, 3 after iridectomy and 3 iridectomy refused, with the following vision :

$\frac{1}{12}$ in 2 patients.

$\frac{1}{8}$ in 1 patient.

$\frac{1}{6}$ in 2 patients.

$\frac{1}{100}$ in 1 patient.

4. *Adherent leucoma of the cornea* in 3 patients, with the following vision, after iridectomy :

$\frac{1}{8}$ in 2 patients.

$\frac{1}{6}$ in 1 patient.

In 17 patients who came under my notice in the progressed stages of the affection, the old routine treatment had been used without any effect whatever.

Of the seven patients in whom the operation, after Saemisch's method had been performed, three showed, at the first examination, keratocele, and four perforation of the cornea with prolapse of iris.

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THE CURE OF CROOKED NOSES BY A NEW METHOD.*

BY JOHN B. ROBERTS, M. D.,
Of Philadelphia.

I present this patient to the society, to show the manner in which I treat the very disfiguring lateral deformity of the nose, so often seen after falls or blows which have fractured the septum and cartilages. The method is, I believe, original. It is certainly attended with very little inconvenience to the patient, who, after recovering from the anæsthetic, can at once attend to his occupation, without wearing any apparatus to call attention to the surgical procedure by which his crooked nose is being made straight and shapely. The usual advice given to patients with deformed noses,

from nasal fracture sustained in childhood or later, is to undertake no surgical treatment, but to become reconciled to the disfigurement of feature as best they may. This is, I am sure, improper advice. The æsthetic objection to a crooked nose is cogent: and, moreover, obstruction of one nostril, from the displaced cartilages, is a frequent accompaniment of such lateral deviation of the tip of the nose.

This man sustained, ten years ago, a fall upon his face, from which he recovered, with the end of the nose bent to the right, and with considerable obstruction of the left nostril. I operated on him day before yesterday. You see now a straight nose, and nothing to call attention to the operation, except a small piece of black court-plaster a little to the right of the nasal bridge. Just within the right nostril, close inspection reveals the head of a pin, situated on the side of the septum, near the columella. The method of operation, therefore, is certainly not objectionable on account of making the patient unpleasantly conspicuous during treatment. This evening I merely wish to show the man, and refer to my method of dealing with such cases, because at a later time I hope to bring the subject of curing nasal deformities before the society in a more formal and elaborate manner. Then I may have no patient undergoing straightening of the nose, to illustrate the remarks.

Replacement of the deformed structures in this case was very simple. With a scalpel introduced through the left nostril, I perforated the cartilaginous septum at its upper and back part, and made a long incision through it in a direction downwards and forwards. This permitted me to push the whole cartilaginous portion of the nose to the left, and overcome to a great extent the lateral deformity. To retain the parts in this position, I introduced a steel pin about one and one-fourth inches long, into the right nostril, and passed it completely through the anterior and upper segment of the divided septum, near the columella. Having the movable portion of the septum thus transfixed, I was enabled by carrying the head of the pin to the left, to move the anterior part of the nose to the left and retain it there by imbedding the point of the pin deeply in the immovable cartilaginous septum and mucous membrane at the back of the left naris. In other words, I incised the deformed cartilage, and pinned it in position very much as you would pin a flower in the button-hole of a coat. There still remained a little deflection of the end of the nose to the right, which seemed to be due to the malposition of the lateral cartilage close to the right nasal

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bone. With a tenotome in the right nostril, I pared the cartilage loose, without perforating the skin, and pinned the parts over to the left by a second pin inserted from the cutaneous surface of the dorsum on the right of the median line. The point of this pin was fixed by having its point imbedded in the tissues of the left naris. It is the head of this second pin that is covered by the small square of court-plaster. The correction of the angular deformity of the septum removed most of the occlusion of the left nostril, which had greatly annoyed the patient.

I have thus given an idea of the method which has, I believe, great capability for relieving unsightly nasal deformities. The novelty consists merely in pinning the parts in position until cicatrization takes place. Endeavors have occasionally been made, as by Mr. Adams, Dr. Weir, and others, to hold deflected noses in position, after operation, by the use of clamps, rods attached to the forehead, adhesive plaster, plugs, and similar devices. All of these are objectionable, because so conspicuous and troublesome, and would probably be adopted only in instances of great deformity. The pin method, however, leaves no noticeable scar, is not troublesome to the patient, and is applicable, therefore, even to those slight deformities whose chief annoyance is an æsthetic and cosmetic one. I leave the pins in position for about two weeks.

A few years ago, Dr. Mason, of Brooklyn, recommended the use of steel needles to hold the nasal bones in position, when, after recent comminuted fracture, it was difficult to keep the fragments sufficiently elevated. He transfixes the nose below the depressed fragments, and carries a piece of plaster or a rubber band across the external surface of the bridge from one end of the needle to the other. The needle acts as a girder to tie the base of the nasal arch and prevent its falling in. This is a different use of the pins or needles from that which I am describing, and for a different purpose.

I have pins of lengths varying from one inch to two and one-fourth inches, and with flat heads, so that there will be little projection under the court-plaster to attract attention when the patient is in public. The heads are square, that the pins while imbedded may be, if necessary, readily rotated by the fingers.

When the deformity is in the osseous portion of the nasal bridge, section with small chisels is usually necessary. Discussion of this topic, however, would carry me beyond the limits of the present subject.

Free incisions are essential in obtaining good results in cases of nasal deformity such as was exhibited by this patient. The surgeon must not spare the knife and thereby spoil the nose. Secondary operations may sometimes be required to get the best results. If a simple incision did not allow proper adjustment, I should excise portions of the cartilage with the oval punch or the scalpel, or make multiple stellate incisions with the stellate punch, and so produce general flexibility of the cartilage.

Recurrence of deformity would, I think, be less likely to occur after free incision, pinning, and cicatrization, than after simple dilatation with or without incision with the stellate punch.

DRUGS THAT INTOXICATE.

BY WILLIAM D. RONALDSON, M. D.,
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The term intoxication as commonly used invariably suggests inebriety caused by the use of alcoholic stimuli; therefore, on account of the limited meaning, it may be more accurate to assume the title: "Drugs that intoxicate, and to whose use one may become habituated."

To attempt to give a complete and accurate enumeration of all the substances included in the list, would be useless for practical purposes and tiresome to the reader, therefore I will divide them into two classes, *Alcohols* and *Narcotics*, and speak of those which are used in the profession; and of the uses and effects of which the general public have a more or less extended knowledge.

Under the first class may be mentioned ether, alcohol, chloroform, Hoffmann's anodyne, spirits, wines, spts. æth. nitros., tinctures, cordials, biters.

Under Narcotics we have: opium and its preparations, morphia, chloral, hyoscyamine, cannabis indica, coca, bromides, caffeine, and paulinia.

These lists include the drugs which are well known to physicians, and whose effects are widely known to the laity: but we may state in general terms that any drug which has a *primary stimulating* and *secondary narcotic* effect, will produce intoxication and perhaps habituation to its use; and also that any medicine or compound into whose composition ether, alcohol, or a narcotic enters (as spts. lavend. comp., tr. ginger, and paregoric) in sufficient quantities to produce exhilaration, will have a similar effect and tendency. It would be superfluous, and of little interest, for me to speak of the abuse of opium

and its preparations, alcohol, chloral, cannabis indica, and the bromides, as its extent is well known and appreciated at home as well as abroad. The other enumerated articles are not so widely used, therefore the cases of habituation are not so numerous; yet I have known of an instance where from Oss. to Oj. of ether was frequently inhaled in from 24 to 48 hours; another where ext. coca fld. Oj. was consumed in the same time, and still others where frequent (very) headache (?) obliged the sufferers to have constant recourse to ether, chloroform, caffeine, or pautlinia. But instances of these classes of cases come under the notice of every practitioner, and it seems unnecessary to call attention to them.

The constant use and frequent abuse of stimulants and narcotics suggests the inquiry: "Are they indulged in on account of gustatory relish, or because of the effects derived from them?" From evidence obtained, I am inclined to say most positively that the latter alone is sought for. The first dose of the one or the other that any one takes produces little else than disgust; and if a majority of the wines and cordials are excluded from the lists, the remaining articles possess nothing to recommend themselves favorably to the taste or palate. Aside from this, observe the habitual drinker and the inebriate. They not only disguise the taste of spirits (by tansy, peppermint, bitters, etc.), but they gulp the dose down in the shortest possible space of time, as if they had an unpleasant duty to perform, the sooner over the better. They do not evince any relish or pleasure, therefore it seems to me that the taste is tolerated because of the effect which ensues. As it is with the habitual drinker, so it is with the opium habitues—they resort to the use of the hypodermic syringe, not only to obtain the most rapid effect, but also to disguise as much as possible the taste of the drug.

The effects of the drugs mentioned are similar: the use of all at first produce stimulation—the abuse, narcosis. As we can have unconsciousness or coma produced by cerebral anemia or hyperemia (two opposite conditions) so also can we have narcotism from an opiate or stimulant: the action of the drugs may be dissimilar, but the resulting effects are identical. They act upon the nervous system, and in the case of alcohol especially, cause tissue change in the brain and internal viscera. As this change occurs, the habitual drinker may become metamorphosed into the diseased inebriate or dipsomaniac. I am very loath to accept the hereditary theory of inebriety: for if wholly reliable, the infant would take as eagerly

to the bottle as to the breast, or as in the case of the inebriate would prefer the stimulant to its food. In a thoroughbred inebriate we sometimes (not infrequently) find not only impotence but also a disinclination to cohabit, and I think it a question for solution whether in this class of patients the spermatozoa have not their vitality destroyed by the alcohol or some of its derivatives. I do not believe a *taste* for stimuli is ever established; but a habit may be acquired in spite of the natural disgust for the sake of the effect, and this habit eventuate in disease or inebriety. From this it seems clear to me why stimuli and narcotics are resorted to in case of pain, trouble, insomnia, and exhaustion; and if spirits were not so easily obtained, or if they and opium were excluded from the community, the other members of the alcohol and narcotic groups would be sought after as eagerly and resorted to as frequently for the same purpose. The fact that these drugs are indulged in on account of their effect, and not for the sake of catering to the taste, presents a feature most favorable for treatment; for by means of substitution and rapid but gradual reduction, the patient may not only be broken of the habit, but also be relieved of any future desire or craving. The records of this line of treatment show the greatest percentage of success, and it is no longer expected that any benefit will be afforded the patient by execration and abuse.

The drugs mentioned being analogous in their effects, and closely allied to each other in composition, extreme care should be exercised in prescribing them or prolonging their use; and by practicing this caution an acquired habit may be prevented, and curative measures rendered unnecessary.

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NOTES ON A CASE OF POISONING FROM MRS. WINSLOW'S SOOTHING SYRUP.*

BY A. B. HIRSH, M. D.

With the object of adding my quota to the list of serious accidents resulting from the indiscriminate sale of secret medical preparations, I have gathered the notes of the following case:

Mrs. A. H. L. took her twenty-months-old boy to visit some friends, and, while there, they (all unknown to her) fed him some unpeeled apple and other indigestible material. Being colicky all that night and next morning, she was per-

* Read before the Philadelphia County Medical Society, September 17, 1884.

suaded by a "friend" to purchase a two-ounce vial of the nostrum sold as "Mrs. Winslow's Soothing Syrup," and of this gave him half teaspoonful doses, as the directions called for, although she insists half of each quantity was spilt through his struggling.

He took, therefore, the first dose at four o'clock on Sunday afternoon (August 24), and, there being no effect, another at eight; then dozing, but not sleeping, from this time till three next morning, the pain starting him again to whining, he was dosed at five; still crying on, three-quarters of an hour later the final similar amount was administered. The mother soon became alarmed at the marked stupor which had now set in. He would touch none of the breakfast placed before him, Mrs. L. said; although sitting upright in his high-chair, his head hung listlessly and he recognized nobody.

I saw him at 7:45 a. m. and found marked symptoms present of poisoning by some narcotic drug. The pupil was contracted down to the typical pin-head; stupor was unmistakable; respiration was very slow, gasping and shallow, while at irregular intervals he would take two or three rapidly-succeeding deep sighs; the pulse was rapid and small; the extremities were cold throughout the case. Taking all these symptoms into consideration, and the fact that the breath bore the peculiar odor of an opiate, I felt warranted in treating the case as one of poisoning by some preparation or derivative of that drug.

The stomach and bowels were emptied at once; frequent cold sponging was ordered, with wet cloths placed on the nape of the neck whenever great trouble existed in keeping him awake. Tr. belladonna was given hourly in aqueous solution. The parents were directed to keep him awake, by all means.

By noon he would begin to lift the eyelids a little, but relapsed into sort of a doze by 2 p. m. Despite all their efforts, he fell once more into a stupor about 6. Calling about this time, I insisted on the mechanical exercise being continued, feeling encouraged by the somewhat improved breathing, and that I succeeded a little while later in arousing him. As the pupil had now begun slowly to dilate, the medicine was ordered to be given every half hour, or twice as often as before. By 11 he began to lighten up, and, on calling half an hour later, I found him languidly trying to push his ball around the table upon which he sat; the pupils were widely dilated, and respiration free. He was allowed to sleep, with slight interruptions, from midnight

until 6 a. m., after which the child showed his great thirst by frequent demands for ice-water. Incoördination of the voluntary muscles now became noticeable, and continued until next morning. A typical belladonna rash was now likewise beautifully shown, also to disappear in time. He slept for two hours about noon, being exceedingly irritable afterwards, but, excepting the use of a tonic, required no other treatment.

As stated in the beginning of the notes, this case is merely placed on record to help expose an existing evil, believing that continuous agitation will finally induce the intelligent public to demand the regulation of the sale of patent medicines, a need concerning which there never was any doubt in the profession.

A fatal result would inevitably have here occurred had no treatment been instituted, and I feel convinced that many such cases happen in our midst, which should be reported; incidentally conversing with Drs. Schoales and Blackwood, I heard of such occurring in their respective practices, and should be glad to hear more fully of those from the gentlemen.

The case is the more pertinent at this time, when any fakir or shopkeeper may legally retail unlabeled poisons in the guise of patent medicines; while one of our inconsistent laws is now being so interpreted as to inform the patient that, in very many cases, his doctor has prescribed him medicine containing poison.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE UNIVERSITY HOSPITAL (PA.), SEPTEMBER 18, 1884,

BY S. D. RISLEY, M. D.,

Instructor in Ophthalmology and Ophthalmic Surgeon in the University Hospital.

Reported by G. E. de SCHWEINITZ, M. D.,

Surgical Registrar of the Hospital, and Assistant Physician in the Eye Department.

Cases and Remarks Illustrating the Importance of Differential Ophthalmic Diagnosis, and its Relation to General Medicine—Strumous Ophthalmia—Granular Ophthalmia—Serous Iritis—Chronic Secondary Glaucoma.

GENTLEMEN: It becomes my pleasant duty, in the absence of Prof. Norris, of welcoming you once more to your studies in ophthalmology. It is needless, perhaps, for me to dwell upon the importance of careful clinical study of the eye, for failure to make such study will hereafter ever be a source of regret to you, while if you take advantage of the opportunities here presented to you, they cannot help but be in the future a

source of gratification and advantage to you. It may seem to you that an organ so small, and one solely devoted to the function of vision, is a limited area in which to spend a life's work; but all the tissues of the body are represented in the eye and its appendages, and a really wide field of study and observation is opened up before you. My experience in this clinic, and in my private office, has taught me that all practitioners of medicine are not equally well-informed upon diseases of the eye, and indeed are probably less at home in the special study of this organ, than that of any other, except the ear. The eye presents special difficulties of study, owing to the necessary knowledge of optical principles which underlie a correct appreciation of the abnormalities to which this organ is liable—the very ability even to see the various tissues of its composition being impossible for the untrained observer, while, of course, the skill to use the ophthalmoscope is a *sine qua non* in the study of diseases of the eye. Furthermore, this delicate organ is constantly exposed to various irritants, to traumas, to functional congestions, especially of the choroid, a vascular membrane lining its interior upon which the whole organ depends for its nourishment, and to constant strains and the long train of evils dependent upon such strains when it is embarrassed—as is only too frequently the case—by departures from its normal anatomical structure. Anatomical peculiarities demand peculiar methods of treatment. In an inflammation of the pleura or an abscess of the hand or elsewhere, you would not go far wrong by employing counter-irritation followed by hot fomentations in the one instance, and poultices in the second; but you would be in error were you to apply these principles of treatment to analogous conditions in the eye; indeed, you may put it down as an aphorism never to use poultices, at least in the ordinary acceptance of the term, in your treatment of diseases of the eye.

Again, in many inflammatory conditions the acetate of lead is a useful sedative and astringent application. Your chemical studies, however, have taught you that lead forms with albumen an insoluble albuminate; so that if you apply this astringent to an inflamed cornea, or to one whose epithelium is eroded by an ulcer, a deposit of the albuminate of lead will be left upon the cornea, and the last condition of that eye will be worse than the first. Peculiarities of function create a demand for peculiarities of treatment, and you should ever keep this rule in mind, not only in the treatment, but also in the differential diagnosis of eye diseases. It is by no means easy to differentiate between the various inflammatory diseases of the eye, and to this end I have brought this series of cases before you.

Case 1. This man applied for treatment yesterday for the first time, having been troubled with his present affection for about one week. As he passes around, gentlemen, you observe that the eyes are red, the vascular system of both bulbar and palpebral conjunctiva is injected. There is but slight glueing of the lids by discharge in the morning, according to his statements, and he complains of some pain and dread of light or photophobia. He has bathed his eyes in salt-water and a mucilage of sassafras pith—both harmless,

but useless applications in the present instance—and also used Becker's eye salve, a patented ointment, the contents of which are unknown; and which is in many conditions a harmful preparation. Indeed, make it a rule never to use any form of medication in the eye, the composition of which is unknown to you. I am quite surprised that this man does not tell us that he has poulticed his eye or covered it with a piece of raw beef or an oyster, these being a few of the very many foolish remedies that people are in the habit of employing in the domestic treatment of eye troubles.

We come now to the question of diagnosis. This condition is differentiated from an ordinary catarrh by the presence of pain and photophobia, which two symptoms are usually absent in the former trouble. Moreover, in any conjunctival disease, pressure upon the eye-ball through the lid will momentarily expel the blood from the injected and dilated vessels; but not so in this case, for here the anterior perforating and episcleral vessels are distended with blood.

Further this man's acuity of vision is markedly diminished, being only $\frac{20}{\text{LXIV}}$ in his right eye, and less than $\frac{20}{\text{C}}$ in the left. A case of catarrh com-

plicating myopia might present such a record of vision, but the myopic patient would be able to read fine print when it was brought near to the eye, while this man is unable to read type of any ordinary size. Finally, the instillation of a mydriatic caused unequal and sluggish dilatation of the pupil, and examination with the ophthalmoscope showed a fine haze in the cornea, the aqueous humor slightly muddy, and on Descemet's membrane, or the posterior elastic lamina of the cornea, a number of faint grayish spots due to deposits of lymph. No distinct view of the eye-ground could be had, owing to the presence of innumerable dark spots seen in shadow in the anterior layers of the vitreous humor; but enough could be made out to show that the veins were too full and margins of the optic nerve entirely blurred. This, gentlemen, is a case of what is sometimes called Descemetitis, but more correctly serous iritis, or as I would prefer to class it, serous irido-cyclitis, as that name more exactly describes the pathological conditions present. The affection is not merely an inflammation of the posterior layer of the cornea, but a disease of the whole uveal tract. You see now why I have dwelt so long upon the points of difference between this affection and an ordinary inflammation of the conjunctiva. In the one case the application of any simple astringent would effect a cure; here it would be worse than useless; while inability to recognize this condition or ignorance of the proper therapeutic measures to be used in its treatment would be the means of marring this man's sight for life.

Treatment.—Frequent instillations of a solution of atropine (gr. iv.-f. $\frac{3}{4}$ j.) in order to keep the pupil widely dilated, and if possible prevent the formation of posterior synechiae or attachment between the iris and capsule of the lens. Internally, I have ordered him 10 grains of iodide of

potassium three times a day. Should this not be successful in checking the progress of the affection, he will be ordered inunctions of mercurial ointment, a drachm to be thoroughly rubbed into the skin once a day.

Cases 2 and 3. These children illustrate two widely different conditions, yet note how closely their general appearance is alike. Both hang their heads, somewhat spasmodically close their eyes and dread the light. Both, no doubt, live in bad hygienic surroundings, as their insufficient physical development only too plainly attests. This little girl, with her anæmic skin, lustreless blonde hair, and typical strumous face, old and careworn in expression before its time, presents a representative case of *scrofulous ophthalmia*; and were not her photophobia so marked, I would demonstrate to you the excessive lachrymation, the injected although transparent conjunctiva, and the depressed central ulcer upon the cornea. This disease is the local manifestation of a constitutional dyscrasia, and while local treatment with atropine, boracic acid collyrium, and later calomel or yellow oxide of mercury, is indicated; this alone will be insufficient, and the progress of the affection will not be stayed until the general system is brought under the alternative and I may say nutritive influence of the syrup of the iodide of iron, cod-liver oil, and improved hygienic surroundings. In the other case examination reveals the conjunctiva infiltrated and granular. The papillæ swollen, and the lids thus thickened and roughened rasping over the surface of the cornea, induce in this normally non-vascular structure the presence of vessels which you see coursing over its surface. Representative cases of granular conjunctivitis, for that is one of the names of this affection, are not common in children, occurring more frequently in men who, like coal-heavers and railroaders, are exposed to dust and irritating particles. Until recently granular lids were looked upon as a local affection, and it is somewhat in this light that I present the case to you, in contradistinction to the other child as possessing a disease which is merely a local manifestation of a general morbid condition. These cases are very protracted, often lasting for years, and I must say that I do not entirely agree with those who regard this condition as of merely local significance, but would rather believe that in many instances a constitutional vice is at the bottom of the trouble. Dr. Swan M. Burnett, of Washington, who has had unusual advantages for observing eye diseases in the negro, finds in this race granular conjunctivitis rare, and trachoma proper almost unknown. His father, also a physician, observed in gangs of laboring men, composed of whites and blacks, that among the negroes there was an immunity from granular lids, while the disease was common enough among the white workmen. On the other hand, strumous ophthalmia is of usual occurrence among the colored races. Now if men of dissimilar race, although exposed to the same external irritating influences, exhibit widely different susceptibilities to this disorder, it is fair to assume that it is of more than mere local significance.

Treatment.—This usually consists of the instillation of a solution of atropine and the application of various caustic substances to the eyelids,

among the best of which is ordinary blue-stone. The excess must always be washed away, on account of the painfulness of this application. At some future time I may discuss with you the treatment more in detail, with especial reference to such cases in which infusions of jequirity are a desirable form of medication.

Case 4. This woman presents herself with the following history: Four years ago she was attacked with inflammation and redness of the left eye, together with severe pain in the brow and temple. The attachment of the iris to the anterior capsule of the lens shows this to have been an iritis, and with this condition the patient was left, either having been not at all or badly treated. Her trouble did not cease now, because for the last three years the eye has been subject to recurrent attacks of inflammation, severe pain, increased tension of the ball, and gradual loss of vision, until she presented the state of affairs which you see now, *i. e.*, chronic secondary glaucoma following iritis. While she is being etherized, I will say a few words to you in regard to the pathology of this condition. The nutritive currents of the eye come from the choroidal tract behind, pass forward, and find egress at the angle of the anterior chamber through the canal of Schlemm. Now, fluids secreted in the posterior chamber will no longer, in the presence of an annular synechia attaching the pupillary margin to the capsule of the lens, escape into the anterior chamber and thus gain access to their normal outlet at its angle and the canal of Schlemm. Fluids thus accumulating in the posterior chamber press the iris forward in contact with the cornea, thus completely closing the angle and increasing the difficulty of excretion. Furthermore, they are retained within the unyielding sclera, increase the intra-ocular pressure, and thus bring about a secondary glaucoma. The delicate axis cylinders of the optic nerve are pressed upon, their functioning power disturbed, and blindness, such as exists in the present case, is brought about. Had the original iritis been diagnosed and properly treated this woman's present condition could have been avoided. At the same time you should be careful not to confound the pain and redness of an iritis with an inflammatory glaucoma, lest you avoid the only cure for the former—mydriasis—which is contra-indicated in the latter condition. Those forms of glaucoma unaccompanied by any inflammatory manifestations are most often mistaken by general practitioners for neuralgias of systemic origin, and seeking for the general cause they neglect the eye until blindness supervenes. Indeed, it has been my experience in more than one instance to have this very unfortunate result brought about. In any case of severe ciliary neuralgia, especially if the attacks be accompanied by dim vision, do not fail to make a critical examination and ophthalmoscopic study of the eye; or not feeling able to do this yourself, refer the patient to some one who possesses the necessary skill.

The patient is now etherized, and I will proceed to perform an iridectomy upon the left eye, not in the hope of restoring vision, for that is hopelessly lost, but to relieve the severe circumorbital pain with which she suffers and reduce the intra-ocular tension.

MEDICAL SOCIETIES.

CHICAGO MEDICAL SOCIETY.

(Concluded from page 461.)

The following lengthy abstract of a paper on "The Recent Treatment of Asiatic Cholera in Vague in Southern India," read by Dr. H. M. Scudder, has been prepared by the secretary with, to use his words, the annotation herewith presented: "It was the author's lot, during nine years' practice in India, to pass through four epidemics of cholera. As he was the only European physician in a town of nearly 50,000 inhabitants, and was at the head of a district hospital supported by the English government, he was called upon to treat a large number of cases. One of the severest of these epidemics occurred during the famine of 1877-78, and he was at the time in medical charge of a large enclosed famine-relief camp containing over 5,000 persons, and where there often occurred a death roll during the height of the epidemic of over 50 per diem, and where as many as 300 at a time were in the hospital sheds sick with the cholera. In this camp the writer had ample opportunity of trying, on an extensive scale, different remedies, and the various modes of treatment, and of comparing the results. We will not enumerate the long list of remedies that have been made use of in the treatment, nor the discussion of the value of each, but confine this description to the mode of treatment employed of late years by the surgeons in Southern India. Before proceeding to this, however, it may be well to state briefly in a word, the writer's views, in reference to the contagiousness of the disease. In India it is generally considered that cholera is an infectious disease, and also somewhat contagious, though not highly contagious, or readily communicable by personal association with the sick, as is the case with small pox and measles. The noxious power of the cholera germ or virus (whether it is Dr. Koch's microbe or something else) seems to be more powerfully exerted some time after it has escaped from the body of the patient than when it is freshly passed. Careful observation by the author and experience the world over seems to establish this fact: whether the disease is contagious or highly contagious seems still to be a vexed question, and remains yet to be decided, and the writer stated his experience from careful study of the history of Indian epidemics he was led to believe that the attendants, and those who come into frequent and close contact with cholera patients are sometimes more apt to contract the disease than those who do not.

For purposes of treatment the writer divided the course of this disease into the following stages:

1. A period of prodromes, or prodromic stage.
2. A first stage, or stage of diarrhoea or cholerae.
3. A second stage, or stage of invasion.
4. A third stage, or stage of collapse (algid stage).
5. A fourth stage, or stage of reaction.

This last stage may be succeeded by a typhoid condition or cholera typhoid state, or the patient may pass directly into a state of convalescence.

In the prodromic stage manifested by lassitude, mental depression, chilliness, nausea, and abdominal discomfort, give ten or fifteen drop doses of spirits of camphor in dessertspoonfuls of hot brandy every hour or two, but be careful not to allow any considerable quantity of stimulants to be taken. When epidemic cholera is prevalent, many are affected by the symptoms just described. If the remedies indicated were promptly taken, the writer is confident that many attacks of cholera would be warded off. It is true that fear often produces these very symptoms, but the spirits of camphor in spoonfuls of warm brandy tends to soothe the fears and dissipate the symptoms, and yet it does not usually disorder the digestion. As soon as diarrhoea supervenes, begin the administration of some preparation of opium, together with aromatics. Camphor and a little chloroform is urgently called for. Two parts chlorodyne to one of spirits of camphor is a very good combination; 30 drops for a dose, to be repeated as required. Another very serviceable preparation consists of equal parts of spirits of chloroform, spirits of camphor, laudanum, aromatic tincture of rhubarb and tincture of ginger. Teaspoonful doses every hour or two according to the urgency of the case, or until four or five doses have been taken. Alternated with either of these combinations, an aromatic sulphuric acid mixture, may be given to advantage. A popular formula is as follows:

R. Acid sulphuric aromat., ʒi.
Tinct. opii deodorat., ʒvj. vel. ʒj.

Sig.—Twenty or thirty drops in water every hour or two.

The writer suggested the importance of administering these remedies hot, unless they create nausea. The hot water (two or three tablespoonfuls) in which these doses are given may be sweetened, if desired. The patient should be required to lie down, and kept perfectly quiet, covered with heated blankets, and dry heat applied to the surface of the body, especially to the extremities, by means of hot bottles, heated flat-irons, etc. In India the administration of calomel to any extent has lately been discouraged, one or two small doses may be given if thought best, but not more. As soon as frequent vomiting commences, or the stage of invasion becomes established, the combinations containing opium, which have been mentioned, had better be discontinued, and either of the following mixtures given instead, in teaspoonful doses at intervals after a spell of vomiting. While at the same time some morphine, or morphine combined with chloral, should be administered by hypodermic injection, as the severity of the case may demand. Either of the following formulae may be chosen for exhibition internally, every half hour, to check the vomiting just alluded to:

R. Chloroform,
Tinct. capsici, aa ʒxxx.
Tinct. canab. ind., ʒxx.
Acid hydrocyanic (dil.), ʒviij.
Ether, ʒxv.
Spts. menthae pip., ad. ʒj.
Syrup sassafras comp.,

M. Sig.—A small teaspoonful every half hour or hour.

Or,

- R. Spts. ammonia aromatica, āā 3j.
Spts. chloroform, āā 3j.
Tinctur. capsicum, āā 3j.
Compound tinct. of cardamom, āā 3ss.
Tinct. ginger, āā 3ss.
M. S.—Give in the same dose as above.

A mixture of aromatic powder, gum arabic, and acetate of lead may also be given alternately with either of these if desired. In any case, mustard plasters should be applied over the stomach and abdomen, but not left on too long, and if required, enemata of eight or ten grains of acetate of lead may be given after each evacuation. The writer further stated that it was important to bear in mind that some preparation of opium or morphine, or morphine combined with chloral are the chief remedies for cholera, and the surest agents we can use to arrest the progress of the disease. When called, therefore, to a case already in the stage of invasion, morphine or morphine and chloral should be administered hypodermically without delay in order to get these sovereign remedies into the system as soon as possible. For if we can arrest the disease before the patient becomes collapsed, his chances of recovery will be very greatly increased. Caution must be exercised, however, when this form of treatment is pursued, for narcotism is easily induced by repeated hypodermic injections. Whereas, very large doses of opiates can be given in this disease by mouth and rectum with comparative impunity. The strength of the solution usually employed for injection is: Morphine, gr. iijss. vel. gr. iv., with chloral hydrate, 3ijss. vel. 3iij. to the ounce of water. Inject twenty or thirty minims. The hypodermic use of morphine and chloral is, of course, contra-indicated when the stage of collapse has become developed. During this stage, it is most essential that the patient should be kept perfectly quiet and in the horizontal position. No violent rubbing should be allowed, but the author has found it beneficial to gently rub the limbs and extremities with hot oil. * * * To allay the thirst, let the patient suck ice frequently. Carbolic acid water or simple acidulated effervescent drinks may also be given by the tablespoonful. It is unsafe to allow the patient to drink any fluid whatsoever in large quantities. In this stage especially, when the acts of vomiting and purging have become less frequent and the algid state well developed, very small quantities of stimulants are useful, but they should be given with great caution, lest vomiting should be provoked. Stimulant enemata may also be given, but where the stomach has an inverted action, it is often better to inject small quantities hypodermically. Experience teaches us, however, that anything like the free use of stimulants in cholera is uncalled for and exceedingly harmful. The writer has sometimes used small doses of both atropine and strychnia administered by hypodermic injection apparently effectual in bringing about reaction. Amyl nitrite by inhalation may be given a trial, but it seems to exercise very little permanent or beneficial effect. Intravenous administration of milk and salines may be resorted to, but the reaction they induce is not generally of a permanent char-

acter, so that many of those who have given this method a fair trial have abandoned it.

Of late years, in Southern India, careful experiments have been carried out in reference to the value of impregnating the atmosphere of the sick room with sulphurous acid by burning sulphur. The result has been that this procedure has been introduced as part of the treatment of cholera. The writer has on several occasions tried this plan by subjecting the inmates of two different cholera sheds to exactly the same conditions and treatment in every respect, with the exception that in one the atmosphere of the shed was kept impregnated with sulphurous acid, and that in the other this precaution was omitted, and found that the proportion of recoveries was considerably greater in the sheds where sulphur was used; he therefore considers this an important adjuvant as part of the treatment. The atmosphere should not be so highly impregnated as to cause the patient or attendants to cough violently. Sulphurous acid thus applied is not only a useful remedy, but it is also believed to decrease the liability of the disease being propagated or contracted by the attendants.

During the stage of reaction, great care should be exercised. Vomiting often continues, and the normal absorbing power of the stomach and intestines is but slowly restored. Liquid nourishment by the spoonful should be most cautiously given. Well-salted broths and milk given as hot as possible, and not too frequently, are the only forms of food admissible until the enfeebled stomach shows signs of recovering its tone.

Peptonized beef tea and milk are frequently well borne, if carefully prepared, so as not to nauseate the patient. If vomiting persists, the following emulsion may be given if deemed best:

- R. Acid carbolici, gr. vij.
Bismuth subnitrat., 3ij.
Mucil. acaciae, āā 3j.
Aqua mentha viridis, āā 3j.
M. S.—A teaspoonful every hour or two.

But in this stage it is good treatment to let nature do the work of restoration, and give as little medicine as possible. We must bear in mind, however, that the kidneys must be assisted to resume their functions, and for this purpose mild diuretics, such as potass. nitrate, should be carefully administered. If fever supervenes, it is apt to be of a typhoid character. A combination of iodine and carbolic acid then exerts a beneficial effect. A popular formula is as follows:

- R. Acid carbolici, gr. iijss.
Tinctur. iodin., gtt. xv.
Aqua menth. pip. ad., f. 3iv.
M. S.—A teaspoonful every two or three hours.

To relieve restlessness and insomnia, potass. bromide is often useful.

The paper evoked a great deal of discussion which may be found as under:

Dr. G. C. Paoli said the author of the paper had omitted to mention a prominent English physician, Marshall Hall, who a few years ago in London read a paper which excited the interest of the medical fraternity in England, because he had advanced new ideas in comparison to the older orthodox views, that in cholera there is irritabil-

ity of the vagus nerve, and in the East the disease was treated by hydrate of chloral and nitrite of amyl, but in Europe it was not so treated. The speaker had seen four cholera epidemics from 1834 to 1866, and since that time he has attended cases when cholera visited Chicago. Regarding the treatment, he would say but a very few words, for every physician was posted about it. Of all the remedies, the best he had known was sugar of lead combined with opium to check the diarrhoea, in the proportion of 2 grains of the former to $\frac{1}{4}$ of a grain of the latter, ordered as one's judgment should dictate. In the stage of collapse, it was useless to give medicines, for the stomach would not absorb them. The blood is inspissated and would not flow, and during this stage for the patient to be environed in dry, heated blankets, was the best method to pursue. Regarding the bacillus or bacteria theory; if they existed in the intestinal discharges of a cholera patient, he believed they were innocent as a cause of the disease, for according to Darwin perhaps we were once a bacillus, and surely we were innocent of purposely causing cholera. (Laughter.) Regarding an atom as a cause of it, this is something wholly imaginary, and could not be seen, as an atom is nothing that we ever see.

Dr. R. H. Engert asked the author of the paper what his percentage of recoveries was in the cases which he had treated.

Dr. John Bartlett gave his experience in treating 250 cases of cholera brought to a hospital in which he was attending physician. The percentage of mortality was extraordinarily large. He thought he would be able to save one-half of them, but only one in six recovered. When they were brought to the hospital they were in the blue stage, or stage of semi-collapse, or partially cyanosed.

Dr. J. H. Etheridge stated that he believed the nervous system would, in the future, be proven to have more to do with the ultimate pathology of cholera than bacilli, which he regarded as an illusionary aspect of the disease. Neurotic remedies should be given at first to relax the vaso-motor spasm of the abdominal vessels to prevent their pouring watery portions of the blood into the intestinal canal, and we then will get at the gist of the trouble; by doing this we will be more able to prevent the venous side from becoming congested, and aid the circulatory system to correctly perform its physiological action. Opium, chloral, and cannabis indicus, will do this better than any other remedies. A few years ago Dr. Chapman, of London, applied ice-bags to the spine of a cholera patient to control the diarrhoea by checking the spasm of the abdominal vaso-motor nerves, which in turn was followed by a proper distribution of blood. It will doubtless often be necessary to administer these remedies hypodermically. Along in the forties (1848-49), chloroform and ether were introduced for this purpose in treating cases of cholera. Regarding the bacillus found by Dr. Koch in water tanks, and in the intestinal discharges, the speaker did not believe they were the cause of the disease, and he was inclined to agree with his friend, Dr. Paoli, in this respect. That they were present, there is no doubt, but they were a sort of "funny thing" to amuse one by looking at them with a

microscope. An illustration, in proof of this, is the following:

In the sixties, Polly, of Milan, stated that in quinsy there was present a leucocyte or infusoria, and that we should administer hyposulphite of soda to kill them before we could cure the tonsillitis—this theory has long since been discarded—so far as those germs are concerned causing quinsy. And he is not convinced that the bacillus causes cholera.

Dr. R. E. Starkweather asked the author what his ideas are on the expediency of people retiring to near or remote distances from the presence of the disease? Also, his observations as to cases of poisoning, where for instance a person had a grudge against a patient and would try to make way with him by administering arsenic or strychnia. He well remembered the year 1854, when the sentiment prevailed more than it has since that people should remove from the city if cholera visited us, and the trains were heavily loaded with the people fleeing from it. He certainly advocated erecting cholera sheds if cholera were in our midst or sheds for any other pestilential diseases. That the public authorities should take this matter in charge for they and the health departments have a legal right to do this, more so than benevolent societies or organizations, his assertions were illustrated how this method was more successful than any other in saving the lives of yellow fever patients at Pensacola by the public authorities, who should, in case cholera was here, have a corps of well-trained nurses available, for in case of rice-water discharges, good nursing was the main thing to be relied upon.

Dr. D. O'Shea said he had been taught years ago that collapse in cholera was similar to shock from surgical injuries. The treatment in both cases should be somewhat similar. Apropos to this, he gave an illustration of a tame rabbit upon which he was about to perform a painless physiological experiment, when the little animal became very much alarmed at the surroundings. He remarked to those present that he believed the rabbit would die from fright or shock, although up to this time it had, to all appearances, enjoyed perfect health. The rabbit died in a few moments, before any further attempt at the experiment was repeated. And not remembering having seen anything in the literature on post mortem appearances of the abdominal vessels of persons dying from shock, the rabbit was dissected. The only thing pathological was that the vena cava contained the blood of the body.

Dr. G. Newkirk asked if there was not some way that the community could be educated through the newspapers to forestall these epidemics. He had recently read in a Jewish newspaper that the Jews in France had not been afflicted with the cholera. He could not understand why they should escape its ravages, unless it was because of their better manner of dieting and habits from instructions they obtained by reading Jewish journals, that rendered them immune to the disease.

Dr. Scudder, in closing the debate, said first, as to the per cent. of recoveries, this varied from ten to eighty per cent. In severe epidemics eighty to ninety per cent. of the cases resulted fatally. If patients were seen early, the fatality would be

much less. In a cholera shed of the relief camp, where there were thirty patients treated with the sulphurous acid, forty per cent. or more recovered. In another shed having everything else to correspond, were twenty cases; the fumigation of the premises by sulphur was omitted in the treatment, and fully eighty per cent. died. The natives of India would not drink well water. Their religion had much to do with the frequent visitations of the cholera, for it taught them to drink only that which descended from heaven. The tanks erected near their religious temples they regard as sacred; at least this is true near Calcutta and Madras. In contrast to the natives of India, were the Chinese and Japanese, because they drank well water, and the garbage and human offal they used to fructify the fields, while in India; all excrescences and offal were not covered up, and when rain descends, which is sometimes eight or ten inches during a night, the surface water becomes polluted, and this they partake of freely to drink. The Chinese and Japanese were comparatively free from cholera. The speaker

did not see that any benefits would be derived by people running away from a district in which cholera was epidemic, i. e., to go away from immediate surroundings. General panic and fright had much to do to predispose to the disease and with its fatality. Poisoning in India is frequent by giving arsenic to cholera patients, and is largely undetected by the police.

To warn the community, as one gentleman has alluded to, is an extensive topic to discuss. If the early known methods of checking the disease were resorted to cholera would not become epidemic. In India great prejudice exists against European medicines, but not so with European surgery (singularly enough), presumably because there are no native Indian surgeons. Europeans are well up in the use of preventive measures. No native of England would travel in the East without a bottle of camphor and a flask of brandy. He would also provide himself with chloridyne, the surgeons using this article very freely, as it is no longer a secret remedy.

LISTON H. MONTGOMERY, M. D., Secretary.

EDITORIAL DEPARTMENT.

PERISCOPE.

The External Appearances of Pistol-shot Wounds.

Dr. D. B. N. Fish publishes a very interesting and useful article on this subject in the *Boston M. and S. Journal*, October 2, 1884, which he thus summarizes:

The distance at which a pistol-shot has been fired may be estimated by the following general rules:

1. From a great distance the entrance wound will usually be large and irregular; there will be absence of any great lividity of its edges, and absence of the marks of powder. The wound of exit, if one is present, will usually be larger than the wound of entrance. At any distance the edges of wounds of entrance will usually be inverted, those of exit everted.

2. From a short distance the entrance and exit wounds will generally be nearly equal in size; the edges of the former will be blackened, and powder grains will be imbedded in the skin, but there will be absence of the scorplings and brandings of powder.

3. Close to the body the entrance wound will generally be larger than the exit. There will often be, in addition to the tattooing of the skin by unburned grains of powder, a mark or brand made by the flame of the gases and of the burning powder, by the soot of the partly burned powder, and by the residue or ash of the wholly burned powder. As a rule, this brand, which may consist of a burning alone of the hair, the skin, or the clothing, or of a burning and blackening of the skin or clothing, will appear at one side of the bullet hole.

The direction of a shot will be shown in part by the trajectory of the ball—a subject of which this

paper does not treat—and by the location of the wound of entrance. The character of the opening, whether rounded or oval, may give some indication of the angle at which the weapon has been held.

The position of the weapon (and whenever this term is used I wish to be understood to mean not its angle to or distance from the body, but the manner or position in which it is held; that is, whether it is held with its hammer and sight above the barrel, as in the usual position for firing, or with the hammer and sight below the barrel, as when the weapon is turned upside down, or in any position of the hammer and sight relative to the barrel of the weapon) is to be determined by the following rule: When the brand appears upon the hair, the skin, or the clothing at one side of the bullet hole, hold the weapon with its muzzle to the bullet hole so that the line of its hammer and sight will meet a line drawn from the centre of the bullet hole through the centre of the brand, and it will show the exact position of the weapon when fired.

This rule is deduced from the newly-discovered fact that, owing to the recoil of the muzzle of the weapon in the direction of its sight, this brand, when it appears at one side of the bullet hole, will appear upon that side which corresponds to the side of the hammer and sight in their position relative to the bore or barrel of the weapon. That is, if the weapon is held upside down the brand will appear below the bullet hole.

Accidental wounds are generally near wounds. When inflicted from a distance they cannot be distinguished from homicidal wounds. In shots fired near by, when a person is known to have been shot while standing, an unnatural position of the weapon, as shown by the location of the brand, will tend to corroborate a claim of acciden-

tal shooting. So, if one is known to have shot himself, an unnatural position of the weapon will show that the wound was probably accidental. The location of the wound and the course taken by the ball may also characterize the wound as accidental.

Homicidal wounds inflicted within the suicide limit have heretofore been distinguished from suicidal wounds alone by the location of the wound and by the uncertain evidence presented by the trajectory of the ball. When the location of the wound has been such that a person might easily have inflicted it upon himself, there have been no means of determining from its character whether it was homicidal or suicidal. To aid in distinguishing between such wounds I offer the following rule: When the location of the *brand*, relative to the bullet hole shows that the weapon has been held in a position of its hammer and sight impossible or improbable for a suicide, it is probable that a murder has been committed. Certain relative locations of this *brand* may also indicate that the victim has been shot while in a reclining position.

Multiple wounds are usually homicidal, but may be either accidental or suicidal.

Shots fired beyond the usual suicide limit are probably homicidal.

Suicidal wounds.—It is said that the suicide rarely holds the muzzle of his pistol at more than eight inches from the body. Suicides generally fire at the side or front of the head, next at the head, next at the heart; they sometimes fire at the back of the head.

The distance from the body at which the weapon must be held to show the *brand* plainly is probably very nearly as follows: for small pistols and revolvers, not over four to six inches; for large weapons of this class not over twelve to fourteen inches.

Diagnosis of Cancer of the Stomach.

M. Dujardin-Beaumetz read a paper on this subject before a recent meeting of the Hospital Medical Society of Paris (*Med. Record*, October 4, 1884). There was indeed no certain pathognomonic symptom of carcinoma of the stomach. In the first place, we are usually unable to determine the exact nature of any internal tumor. Histology has given us a very complete list of the various forms of cancer, but clinically we can make no such fine distinctions.

It has been asserted that the duration of carcinoma is shorter than is that of other chronic affections of the stomach, three years being given as the maximum. But while this might be true of some varieties of cancer, it was not so of all. The author recalled one case of undoubted carcinoma, as proved by autopsy, in which the earliest symptoms preceded death by twelve years. It might be objected that the case was one of cancer following ulcer of the stomach, and that the earlier symptoms were those of the latter affection. Such an assumption was, however, gratuitous, and, besides, the author had seen other cases in which the duration, though shorter than in the instance just cited, yet exceeded greatly that usually set down for carcinoma.

The diagnosis between cancer and dilatation of

the stomach was a matter of considerable difficulty. As regards sex, men are more subject to cancer, and so they are to dilatation. Both affections are met with usually at about the age of forty years. Quesnel's assertion, that every cachectic person suffering from a chronic affection of the stomach has carcinoma, cannot be maintained. And even painful oedema of the legs, regarded by Trouseau as characteristic of cancer, may occur with simple dilatation. Pain is not a symptom of any great value, for although it usually exists it may also be absent. The vomiting of coffee-ground matters, formerly regarded as pathognomonic of cancer, may occur in dilatation, and is, therefore, a sign of no exceeding value. Even the existence of a tumor may be misleading, for a thickening of the stomach walls may occur in dilatation and may be mistaken for cancer. If, however, the tumor be well defined and lobulated, the diagnosis of cancer is rendered fairly certain. The German method of setting free a large quantity of gas in the stomach, the author considered to be practically of no value in diagnosis. It has been asserted that in the case of cancer the hydrochloric acid is wanting in the gastric juice, but this is equally inapplicable and valueless in practice.

M. Romelare, of Brussels, had noted a fact which M. Dujardin-Beaumetz thought might prove useful in this connection. He had found that in cancerous affections of the stomach and liver the amount of urea excreted was reduced to an average of 120 grains, and never exceeded 150 grains in the twenty-four hours. In the case of ulcer of the stomach, on the other hand, the amount of urea ranged from 250 to 500 grains, and never fell below 225 grains per diem. The author had verified these conclusions in a general way, yet they were not entirely reliable as a means of diagnosis. He had had a patient in whom the daily amount of urea excreted was but forty-five grains, and had, therefore, concluded that the disease was cancer, but found at the autopsy that the tumor was a hydatid cyst. There was still another procedure which might be of assistance in establishing a diagnosis. He had procured an amelioration, and even a temporary lull in the symptoms, by regular and methodical washing-out of the stomach in the case of carcinoma. In the case of dilatation, however, no improvement was obtained by this practice.

The Treatment of Whooping Cough.

Although we have so many unsatisfactory recommendations for the treatment of this intractable disease, yet we deem it well to reproduce from the *Medical Press*, September 24, 1884, the treatment advocated by Dr. Robert J. Lee, who says:

"It is to be feared that experiments in treatment will not lead to any satisfactory results. It is better not to indulge in any idea of discovering a specific for this disease. Any one who expresses a strong view on the value of some particular remedy, may be reasonably suspected of insufficient observation and experience. In practice the best plan is to divide your attention between the general and the local symptoms, or rather to treat them separately. By the local symptoms I mean the laryngeal spasm, and for this the treatment must be chiefly local. Among the local remedies

there is none which gives more decided relief than the inhalation of carbolic acid, a combination such as is used in this hospital, of carbolic acid, oil of pine and tincture of benzoin. Alum is a popular remedy with honey, and this acts apparently locally. Bromide of potassium and tincture of belladonna iv. to v. grains of one with iv. to v. minims of the other, seem to diminish the laryngeal irritability for a time, but in severe cases no great benefit is derived from them. As regards the general treatment we have to consider the symptoms of fever, and wasting. Ipecacuanha, small doses of antimony, quinine, and cod liver oil are the chief agents which may be employed in the relief of these symptoms. The great value of change of air, particularly from London or inland to the sea, is well known, and in the latter stage of the malady is superior to any medicinal remedy.

"I will conclude these remarks with the routine treatment, if I may use such a term, which in the majority of the large number of cases I generally adopt. If the disease is in the early stage I prescribe from half a drachm to a drachm of the *mistura potassi bromidi et belladonna* of our pharmacopæia, with an equal quantity of *mistura oxymelli scillæ*, and order the application of turpentine liniment every night to thorax and back; and the inhalation, when possible, of the fumes of Stockholm tar, obtained by gently heating the tar or stirring it with a hot poker. This is an economical and effective plan of treating the spasm. In the later stage of the disease the bromide and belladonna mixture should be given only at bedtime, and during the day small doses of cod liver oil and iron will best repair the condition of wasting.

"As the mortality from whooping cough is much greater in infants under twelve months than in children above that age, it is well to protect the former as much as possible from any risk of infection."

The Present Views Concerning Nutrition.

Before the late International Medical Congress Prof. Kronecker (Berlin) read a paper on this subject. The following is a summary:

1. The process of deglutition does not consist of of three acts (Heuermann, Magendie), nor of two stages (Mouru, Arloing), but of one act (Falk, Kronecker, Meltzer), lasting less than one-tenth of a second.
2. The essential agent in swallowing is the mylo-hyoid group of muscles (Meltzer), not the pharynx, nor the œsophagus (Arloing).
3. Hereby, the pressure on the space of the throat is raised to more than thirty centimetres of water, and the contents are driven through the pharynx and œsophagus, in normal conditions, as far as the cardia.
4. In many persons, in whom the cardia is weak, the mass is propelled into the stomach.
5. Each single movement of deglutition is attended by regular contractions of the constrictors of the pharynx and of the œsophagus.
6. The contraction of the œsophagus is not peristaltic, but takes place in three sections (like the auricles and ventricles of the heart).
7. Each of the three sections of the œsophagus has its own period of contraction, and a special latent period of stimulation.

8. The sequence of movement does not depend on the continuity of the œsophageal tube (Mosso). The entire movement as far as the stomach lasts in man about six seconds, in the dog about four seconds, in the rabbit about two seconds.

9. The last act of swallowing is followed by contraction of the entire tube, especially strong after frequent deglutition.

10. The cardia, which is, however, generally in a true condition, takes part in the act of deglutition.

11. The contraction of the throat-section of the œsophagus propels the mass through the cardia into the stomach.

12. Eructation is followed by contraction of the pharynx as far as the cardia, without movements of deglutition on the part of the mylo-hyoid muscles.

13. Drinks containing carbonic acid cause spasmodic closure of the œsophagus, and such closure cannot be prevented by fresh acts of swallowing.

14. Irritation of the glosso-pharyngeal nerve inhibits the action of swallowing.

15. If the glosso-pharyngeal nerve be divided, the œsophagus undergoes tonic contraction, which may last longer than a day.

Tuberculosis.

From the *London Medical Times*, September 6, 1884, we learn that Prof. Demme, in Berne, defines tuberculosis of children, like that of adults, as a specific infection disease, associated with the entrance of Koch's bacillus into the affected organ. In order that this infection take root, a soil favorable to the development and propagation of the bacillus is necessary, thus supporting the view of individual predisposition to tubercular disease. This predisposition can be transmitted from generation to generation. Thus, of 366 cases of primary visceral tuberculosis, this hereditary predisposition was found in 71.8 per cent.; in 823 cases of joint and bone tuberculosis, in 69.6 per cent.; in 692 cases of lymphatic glandular tuberculosis, in 65.4 per cent.; and in 51 cases of lupus, the hereditary tendency was found in 37.2 per cent. of the cases. This individual predisposition can further be acquired through certain external life influences, especially through suffering from infectious diseases, such as measles, and more rarely whooping-cough. Thus of individuals, not the subject of any hereditary taint, who had suffered from measles, 6.8 per cent. got tubercular pneumonia; 8.1 per cent. joint tuberculosis; 8.7 per cent. lymphatic glandular tuberculosis; and 3.9 per cent. lupus. As to the mode of entrance of the bacilli into the organism, that by inhalation or by ingestion was by far the commonest at all ages; nevertheless, in any given case, the difficulty of locating the first tubercular starting-point rendered this observation, seeing the smallness of the figures, not very reliable. As regarded the extremities as places of possible entrance for the bacillus, it appeared that eczematous and impetiginous eruptions, so common in childhood, and the subsequent localization of the bacillus in the bones of the extremities after possible injury, ought certainly to be reckoned with. As a rare mode of infection, Dr. Demme records four cases (without hereditary tendency) in which milk of tubercular

(Perlsucht) cows appeared to be the source of infection. Two cases of congenital tuberculosis are also given.

Life, the Great Antiseptic.

In the course of an address on Puerperal Pyæmia, read before the Indiana State Medical Society, Dr. Wm. H. Myers said:

"Preserve it, restore healthy functions, control by rest and position the nervous vascular and muscular action, and the repair of injuries proceeds like healthy nutrition. Life and putrefaction are not correlative but antagonistic, and in proportion as we utilize and economize the attributes of life, we will find ourselves independent of those changes which are inherent to decomposing organic matter. Lister suggests that the tissues of a healthy living body have a power of counteracting the energies of bacteria in their vicinity and preventing their development. Specific diseases are like specific forms of animal or vegetable life; they can be produced only by specific pre-existing germs. There is no such thing as spontaneous generation of the entities which generate disease, any more than there is of the innumerable forms of animal life which make their appearance wherever a material suitable for their development is exposed to the atmosphere. We know that the air is full of floating living particles, ready to spring into activity whenever they may light upon a congenial soil. In such numbers do they exist, that present but the proper soil, and the appropriate germ inevitably finds its way to it. Each particular malady is due then to the invasion of the system by some microscopic organism, which, multiplying itself within the living body, gives rise to the phenomena which physicians describe as the disease. This is the teaching of McLagan in his 'Germ Theory of Disease.' This is true also of certain diseased conditions, as in the case of wounds. It is now believed that when they are other than normal, it is owing to the invasion from without of living organisms, and that the constitutional disturbances previously regarded as the natural consequence of every severe wound or surgical operation were really dependent on the introduction of air-carried germs of living organisms into them, and that in their absence, healing by the first intention is certain to occur. But we are told by those who doubt Listerism, that if there be any truth in the theory, these air-born germs should settle and multiply themselves in every cut or solution of continuity, and that the danger from the most trifling incisions should be as great as it is from the most serious. To this we reply, by presenting a most important fact in connection with the micro-organisms to which these germs give rise, without which the higher forms of animals which they infest must speedily succumb before their attacks. If their invasion is undertaken in insufficient force, or upon an animal in robust health, they are refused a foothold and expelled, or if they have secured a lodgment in the tissues they are laid hold of and digested by them; this fact has been repeatedly observed and demonstrated by Cameron, Lister, Billroth, and Cheyne. They have also proved by experiment that an undisturbed healthy coagulum in the vicinity of living tissues will resist the devel-

opment of putrefactive bacteria, even when present in a highly concentrated form. In illustration let us apply these statements or facts to surgical procedures, and they will explain the success which has attended important operations without antiseptic precautions: notably does this apply to ovariectomy."

Does Male Copulation without Emission Injure Female Health?

The *Medical News*, August 30, 1884, says:

It has been commonly believed that if the act of sexual intercourse is incomplete, by not ending in the discharge of seminal fluid within the sexual organs of the female, uterine disease is liable to result. Some writers have even gone so far as to assert that malignant disease of the neck of the womb could thus be caused. The sin of Onan was again denounced; conjugal onanism was assailed with a new weapon, and the thunderbolts of physiological vengeance were launched against the unhappy women who permitted sexual intercourse without having the womb "refreshed and soothed" by half a teaspoonful or so of one of the cheapest of human secretions. Onanism is abominable, unnatural, and there is enough ground for its absolute condemnation without involving the help of an improbable hypothesis or downright error.

Ten years ago Bertillon, writing upon *Hygiène Matrimoniale*, declared that the assertion as to the beneficial influence of the spermatic fluid upon the uterus had no scientific ground, and justly criticised the hypothesis. Nevertheless, the assertion would not die; it was vitalized by the faith and proclamation of too many doctors, and has still kept rising to the surface of periodical medical literature at occasional intervals. But now, as we think, Dr. Van de Warker has given it the *coup de grace*. This able investigator and accomplished gynecologist has published in the *American Journal of Obstetrics* for August an important paper entitled "A Gynecological Study of the Oneida Community," and the influence of non-ejaculation upon the health of women is one of the topics considered. The rule of non-emission was observed in sexual intercourse in the Oneida Community, and in such continence, more unnatural than conjugal onanism, no discharge of semen takes place either before or after the withdrawal of the penis. Now it plainly follows that if the influence of the seminal fluid upon the cervix is so necessary for the healthy state of the womb, those women of the Community whose wombs had been for years repeatedly subjected to the venereal orgasm—in some cases intercourse took place oftener than seven times a week, a more than brutal licentiousness—and had not had a drop of seminal fluid in all this time to refresh and protect them from disease, those women ought to have shown a great prevalence of uterine disease.

Seven years ago Dr. Van de Warker was asked to examine the adult female members of the Community with reference to the possible injurious effects of the sexual practices observed. In answer to this request he began such examination, but after one-fourth of the members had been subjected to it, it was stopped by order of

the head of the organization. Nevertheless, enough was learned by the examinations that were made to justify Dr. Van de Warker in stating that he could discover "nothing but negative evidence as to the effect of male continence upon the health of the Community."

Evening Rise of Body Temperature.

The *Lancet*, September 20, 1884, says:

The daily variation of the temperature of the body is a fact which has not yet been satisfactorily accounted for. Dr. Ringer has observed (*Proc. Roy. Soc.*, xvii., p. 287) a diurnal variation, independent of food or other circumstances, the maximum temperature ranging from 9 a. m. to 6 p. m., and the minimum from 11 p. m. to 3 a. m. M. Maurel recently read a paper before the Académie de Médecine, in which he sought to establish the dominant influence of food in the production of the evening rise of temperature. Light, motion, and alimentation have been investigated in this connection. By feeding animals during the night and causing them to fast during the day, M. Maurel states he has been able to make the maximum temperature appear at any hour he chooses. The experiments must be prolonged over several days in order to obtain the results. This condition would probably be explained on the principle of habit; and although the term "habit" may be classed as a question-begging epithet, there yet does appear to be something of a true explanation in it. For instance, a patient becomes the subject of a catarrhal affection of the bowels attended with diarrhoea; it is well known that after the disappearance of the signs of catarrh there is a looseness of the bowels to be dealt with, which looseness may perhaps be best explained on the hypothesis of a "habit" of the musculo-nervous apparatus of the intestines. Many other examples readily suggest themselves. The influence of light and movement were found by M. Maurel to have an altogether secondary influence on the temperature of the body.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—A well-written sanitary article on "Our Clothing and Our Houses," by Dr. Louis W. Atlee, appears as a reprint from the *Journal of the Franklin Institute*.

—Dr. W. A. Edwards, of this city, has prepared, in a reprint before us, a careful epitome of recent studies on Rötheln or German measles, adding original observations. It would appear to be a more serious disease than is usually supposed.

—The annual address before the Medical and Chirurgical Faculty of Maryland at its last meeting was read by Dr. William Pepper. His subject was: "Force vs. Work: Some Practical Remarks

on Dietetics in Disease." Of the many valuable suggestions it contains, we quote one the truth of which early impressed us:

"While the hot water method can be used with advantage in a limited number of selected cases, but is liable to be abused and to cause serious harm in many others, I have no doubt that the recent craze has done good by calling attention to the fact that our customary beverages, tea and coffee, are taken far too strong. I am almost tempted to say that, taking men and women together into consideration, as much harm is done to health by the excessive use of strong tea and coffee as by alcoholic excess. My case-books show so many and such extreme degrees of insomnia, of vertigo, and of various forms of digestive trouble due to this cause, that I have felt that it must be unnecessary to quote any in illustration."

BOOK NOTICES.

A View of the Laws Relating to Physicians, Druggists, and Dentists. By Richard J. Williams, of the Philadelphia bar. 8vo., pp. 115, Philadelphia. Price \$1.50.

This useful collation of the medical laws of this Commonwealth will instruct the physician in his rights, duties, and liabilities, both towards his fellow physicians, his patients, and the public.

The author treats first of the general legal principles which are involved in such relations, and then he gives the various state enactments which bear on the points. He has also touched on the modes of securing and collecting fees, a matter of general interest, and discusses the laws governing the relative position of druggists and physicians, a topic which we know sometimes provokes considerable discussion.

It is easy to see from this, that the volume is one that a Pennsylvania physician will do a wise thing to invest his money in.

The Elements of Pathology. By Edward Rindfleisch, M. D. Translated from the first German edition, by W. H. Mercur, M. D., revised by James Tyson, M. D. Cloth, pp. 263. Price \$2.00. Philadelphia, P. Blakiston, Son & Co.

Professor Rindfleisch is already favorably known to the American public by his admirable treatise on pathological histology, and the present smaller and more elementary work will certainly meet a welcome. It is a masterly summary of the principles of this difficult study, and will be as satisfactory to many physicians as to students.

The author's plan is somewhat novel. He divides his book into two parts. In the first he treats of the local outbreak of disease, and then of its extension anatomically and physiologically. This exhausts most of the pathological processes.

In the special part which follows he describes the traumatic, parasitic, and anomalous diseases.

The style is tolerably clear for a German work, such being as a rule no models in this respect. The translators have overcome the difficulties of the original so successfully that they have made of it a readable and even agreeable text-book.

Transactions of the Medical and Chirurgical Faculty of Maryland, pp. 243, 1884.

Transactions of the Medical Society of California, pp. 267, 1884.

These two volumes are extremely creditable specimens of professional industry. Both are largely made up of "reports of progress" in the various special branches of our science, and the selection and presentation of the facts, drawn from a wide range of reading, are made with a great deal of discretion. They are, however, by no means deficient in original articles. In the Maryland volume we have been particularly pleased with an article on cancer by Dr. C. H. Rohe, taking a much more cheerful view of the prognosis of that dread disease than is usual.

In the California Transactions we may call attention to an interesting series of cases reported by Dr. H. J. Crumpton, under the modest title, "Experiences of a Country Doctor." They illustrate what we have often said in these columns, that the carefully-reported observations of country physicians are quite as valuable as those obtained in hospitals, and perhaps more so. A study of the causes of the changes of climate on the Pacific coast, by Dr. J. B. Trembley, is another article in the volume quite deserving a careful perusal.

The volumes also contain the usual addresses, proceedings, necrological notices, etc.

A Practical Treatise on Disease in Children. By Eustace Smith, M. D. Cloth, 8vo., pp. 844. New York, Wm. Wood & Co., 1884.

The aim of the writer of this work is not merely to treat of the diseases peculiar to childhood, as is the scope of most works of similar nature, but to discuss the whole subject of disease and diseased conditions in early life. His point of view is that of the clinician, and it is to the clinical aspects of disease to which he devotes his main attention. Hence, his treatise is both wider and narrower than others, embracing more of the nosology, but less of the pathology.

In looking over his pages, we have been particularly well pleased with his full and life-like description of the symptoms and course of morbid processes. Evidently, they are drawn from life, and after long and close observation, many of

them are not surpassed by any writer whom we recall. His therapeutical directions are not so satisfactory. They run too much in one groove, and are too exclusively those of one who sticks close to a rather routine system of practice. This he partly acknowledges in his introductory remarks. The fault is not much of one in a practitioner—perhaps it is a virtue; but the case is different with one who undertakes to write a comprehensive treatise.

Dr. Smith pays much attention to the nursing and dietetics of infancy, and this is a valuable feature of his book. He attaches to these aids to the medical management that weight which they possess, and this is a great deal.

From what we have said the reader will gather that this is one of the best works on the subject which has lately appeared. We are still of the opinion, however, that the effects of race and climate on disease are such that a work written from American experience is, after all, the best for American physicians.

A Practical Treatise on Fractures and Dislocations. By Frank H. Hamilton, M. D. Seventh edition. 8vo., pp. 1005. H. C. Lea's Son & Co., 1884.

The classical work of Dr. Hamilton has been so long before the profession that any introduction of it to medical readers, either of this country or of Europe, would be quite superfluous. Suffice it to say, that this new edition has been revised with elaborate care by the eminent author, and appears with numerous additions, making it a considerably larger volume, and adding proportionately to its value. There are few points connected with the traumatic lesions of the bones, that the reader will not find discussed in a satisfactory manner in its pages.

The author defends himself at the outset for not accepting many of the results obtained by recent experimenters on the cadaver. He gives reasons, and they seem to us good ones, for his skepticism about the applicability of these experiments to lesions of the living muscles.

The numerous contributions to this department of surgical science have been carefully incorporated by the author, and a comparison of this with the first edition, published just twenty-five years ago, furnishes gratifying testimony to the immense strides which have been taken by this, one of the most beneficent departments of the chirurgurgical art.

The work is very fully illustrated, and is put in the market in that excellent manner characteristic of the well-known publishing house which issues it.

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STATE CONTROL OF MEDICAL EDUCATION.

This question is every now and again agitated, and various suggestions have from time to time been made in reference thereto.

The latest recommendation is that contained in a paper read before a recent meeting of the Medico-Legal Society of this city, and consists essentially in the idea of establishing a State Board of Examiners, who alone shall have the authority to license a man to practice medicine. This suggestion arises from the fact that some persons hold that the educational parties, those who have charge of the training of the medical aspirant, ought not to have the power to license him. We must confess that we have never been able exactly to grasp the force of this argument ; the only point in its favor that we can see is that favoritism may possibly open the door to an unworthy candidate, but such a contingency is equally liable to arise in connection with a State board. A strong point in favor of examination by the teaching faculty, is to be found in the acquaintance with the pupil, which two or more years of intercourse gives to the teacher ; for we must remember that it is not always the *best posted* nor the most promising physician who is able, under the trying ordeal of an examination for a degree, to give the largest number of categorical answers. A retentive memory is not the only requisite for a good physician, while it is the possession of a good memory that greatly helps the candidate to pass a good examination. The intercourse between teacher and pupil has afforded the former many opportunities for observing the nature and qualifications for practice of the latter, which help him as much as does a good examination in making up his mind as to the candidate's fitness for a degree.

That some reform is necessary in our present system of medical education, in order that the public may not be preyed upon by incompetent, but licensed physicians, is self-evident. To us the evil lies in the fact that there are altogether too many medical colleges, over which there is no State control, and that the rivalry existing among these various colleges must, in the very nature of

events, tend to lower the standard of education that obtains therein. This is self-evident.

Physicians are only human, and naturally desire to make as much money as they conveniently can; hence, when each student is worth twenty dollars a year to each professor, it is to be expected that the professor will instinctively offer every possible inducement to the student—and what greater inducement can he offer than a well-known reputation for an easy examination? The majority of physicians want diplomas; they regard the practice of medicine as a business, and they want the license to conduct this business; hence, naturally, they are going to get this same license with as little trouble as possible. This fact is attested to by the success (financially) of the various "diploma mills," that have from time disgraced American medicine. The necessity for some reform, looking towards "higher medical education," will be keenly felt so long as the *fee system* obtains in our medical colleges.

It would seem to us that the true remedy for the present low standard of medical education, is to be found in such legislation as will render the teacher independent (financially) of the taught, that will leave him free and untrammelled to pass or reject, as the merits of the candidate before him shall dictate. Recognizing that medical professors are only men, as we have already said, it must seem evident that even the best and most conscientious of them will, instinctively, unknown to their own consciousness, unmeaningly, innocently, and with the best possible intentions, be biased, be influenced by the consideration of money. Let no prudish ideas disguise this fact, for it is a fact.

Now, therefore, if we wish our legislature to interfere, let us ask them to endow some particular college—or if partiality be feared and the legislature is inclined to be generous, all of those now existing—with such sums as will insure to each and every professor a full salary, no matter whether the institution with which he is connected shall have only one or one thousand students. Let the receipts from the students be used to pay the running expenses of the college (out-

side of salaries), and the surplus be paid into the State treasury. Thus the professors could afford to be absolutely independent of the students; and could such independence be secured, we imagine that there are very few persons who would question their competency to conduct examinations.

Let us suppose a State Examining Board: in the first place, we bring politics into medical education, and it is a broad truth that politics contaminates, more or less, all that it touches; its influence is bad. Of course, the Governor would appoint this Board. Herein he would find, ready at his hand, more positions with which to reward his henchmen; for it is well known that even the greatest reformers believe that "to the victor belong the spoils," and no secret is made of the fact that the positions within the gift of a Governor, as of all elective officers, are parceled out to those who have aided in his election. Therefore, we have an examining board of politicians, all of whom have "axes to grind," and all of whom are under obligations to others, whereby they are rendered infinitely less independent than are the examining faculties of to-day. It will not require a very vivid imagination to picture to one's self the terrible abuses that would creep—no, not creep but *stalk boldly*—into the presence of an *examining board of politicians*. May kind providence preserve our noble profession from such a disgrace!

There are several colleges in this country to-day, wherein the endowment has taken the place of the fee system, and the standard of education has been elevated accordingly—thus lending force to the argument, that the solution of the problem of "higher medical education" is to be found in *endowment and independence*. Let us ponder well and carefully weigh the prospective danger, before we commit the power to license men to practice medicine into the hands of politicians; do not jump "from the frying-pan into the fire;" let well enough alone, if we cannot make *well, better*. Do not let us invoke outside interference, that will tend to place our medical examinations on the plane of a ward convention.

A CENTURY WORTH LIVING.

In 1824, sixty years ago, therefore, M. CHEVREUL, then a mature man and a chemist of high standing, was appointed in charge of the laboratory of the manufactory of the Gobelins, in Paris. M. Chevreul is still director of that laboratory, and though in his ninety-ninth year, is active and alert bodily and mentally.

Every winter he delivers his lectures with the same force, and is as much awake as ever to all the advances of his difficult and progressive science.

What is the secret of this wonderful vitality?

Let him answer himself. His words are: "*Je le dois à la moderation de mes goûts.*"

This is his secret: Moderation in all things. He has no hobbies. He is no vegetarian, but a meat consumer. He is extremely temperate, not even using wine at his meals, which is very unusual in France. His drink is water only, though at times he takes a little beer.

M. Chevreul's principal discoveries have been the methods of reducing fats, and in the development of the theories of colors. Millions of dollars have been made out of these, but not by him. Devoted to science, he has sought no other reward than the pleasure of the pursuit of truth. His discoveries have been free gifts to the race. The world of science could not do better than to celebrate the hundredth birthday of such a member by some appropriate and general testimonial.

NOTES AND COMMENTS.

Acute Vomiting in Infancy Treated by Nutrient Enemata.

Dr. A. Withers Green reports the following instructive case in the *Medical Times*, September 27, 1884:

H. Edward H. is a rickety, bottle-fed child, 7 months old. On September 6, it had a bottle of milk which was somewhat sour, but went to rest as usual. During the night the child was seized with vomiting and diarrhoea. I was called on to see it at 5 a. m. On the 7th I found the eyes sunken into their sockets, great pallor and listlessness. The infant was cutting its right upper central incisor. I lanced the gum, and ordered one teaspoonful of castor oil. After the oil had

acted, the diarrhoea ceased, but the sickness was unabated. Milk, whether fresh cows', condensed, or artificially-prepared human milk, was not retained, neither was barley water, rice water, beef tea, nor raw beef juice; in fact everything was pumped up unaltered, sometimes seeming hardly to have got into the stomach. By the evening of the 8th the child had been some hours passively convulsed or else very restless, extremities at times cold and fontanelle very depressed. Lime-water, bismuth, Hyd. c. creta, gr. $\frac{1}{4}$ every four hours, Tinct. opii \mathcal{M} $\frac{1}{2}$, Tinct. iodi \mathcal{M} $\frac{1}{4}$, Creasote \mathcal{M} $\frac{1}{2}$, Glycerinum boracis, all seemed useless. Nutrient enemata were now commenced, after my evening visit on the 8th, and were continued until the morning of the 12th, as nearly as possible every two hours. The enemata were in amount two tablespoonfuls with half a teaspoonful of brandy in each, and consisted sometimes of condensed, or fresh cows', or artificially-prepared human milk, sometimes of beef tea of different kinds, all slightly warm. After a few times the child kept quite quiet while the injections were being given, and seemed revived after them. None of them were returned. Since the nutrient enemata were commenced, the bowels have acted twice daily, gradually getting less slimy and more natural. For rather more than three days and three nights no nourishment was taken by the mouth, the lips being moistened with brandy and milk. On the 9th a warm vinegar and water compress was kept most of the day round the waist, and since the 9th one tablespoonful of cod-liver oil was rubbed into the chest after washing the child each morning. During the night of the 11th, beef tea, made with Liebig's extract of meat was kept on the stomach, one tablespoonful about every four hours. On the same day the child smiled and seemed hungry, but was sick if more than a small quantity was given at a time. From the time the stomach began to retain beef tea, bismuthi subnit. gr. $\frac{1}{2}$, with Tinct. Opium \mathcal{M} $\frac{1}{2}$, was given when any sickness or retching occurred, and seemed to do good. On the 13th half a teaspoonful of cod-liver oil began to be given three times a day by the mouth. On the 14th half a teaspoonful of steel wine began to be taken as well. Though the beef tea was the first thing retained by the stomach, the child soon began to refuse it, preferring its bottle of cows' milk (boiled) and water. The parents consider the issue highly satisfactory, as they thought their child was for some days a little better than a corpse, while now it is daily gaining strength and vigor.

When to Bleed a Pregnant Woman.

In his address on "Lacerations of the Female Sexual Organs," before the last meeting of the American Medical Association, the late Professor S. D. Gross says:

"If I were asked under what circumstances a pregnant woman, in sound health, without any complications, ought to be bled, I should answer, first, when she is threatened with abortion, miscarriage, or convulsions; secondly, when there is a rigid os, obstinately refusing to yield after the labor has been in progress for six, ten, or twelve hours; thirdly, as a rule, in tardy labor in primiparae, especially after the age of thirty; fourthly, where there is, so to speak, rigidity of the general system, including, of course, the sexual organs; fifthly, when there is a decidedly feverish condition of the system, associated with severe headache, great heat and dryness of the genital organs, a rigid os, or os and perineum, and inefficient, teasing labor-pains; and, lastly, in torpor of the uterus from the effects of inflammation, gout, or rheumatism, interfering with or retarding delivery. In all, or certainly, in most, of these conditions, I should follow up the effects of the bleeding with an anæsthetic, or a hypodermatic injection of morphia. I solemnly believe that, if these rules were properly observed, the process of parturition would be greatly facilitated, the pains of labor materially abridged, and the risk of lacerations, which now stand as such a blot upon obstetric practice, would be reduced to the merest minimum, not to say anything about the much greater safety of the child, and the more rapid recovery of the mother.

"As to the quantity of blood to be abstracted, every case must be met on its own merits. While in some instances the loss of a few ounces may suffice, in others, especially in strong, robust, plethoric women, sixteen, twenty, or even thirty may be required."

The famous Dr. Battey, of Georgia, in discussing Dr. Gross' paper, said: "The summing-up of my obstetrical experience is (to put it in a word), in looking back over it, in not a single instance have I regretted the use of my lancet in obstetrical practice. In many, many instances, as I now recall them, I think that positive good would have grown out of the more frequent use of it. I bleed, sir, still."

The Influence of Salicylic Acid on Respiration.

The Paris correspondent of the *Brit. Med. Jour.*, September 20, 1884, tells us that M. Bochefontaine, after a series of experience on the influence

of salicylic acid on respiration, affirms that it has a favorable influence on the respiration of typhoid patients; it restores to the respiratory movements their amplitude and normal rhythm, and thus allows the hæmostasis to regain its lost activity. In healthy animals, submitted to the influence of salicylic acid, the prolonged inspirations are simultaneous with the lessening of the temperature. The same correlation is observed in typhoid patients treated with salicylic acid, in doses of from five to six grammes; their temperature becomes rapidly lowered simultaneously with the appearance of normal inspirations. The action of salicylic acid on the respiratory system of typhoid patients cannot be attributed to a modification of the blood. Experiments have demonstrated that the quantity of salicylic acid which enters the economy after being absorbed by the stomach, does not have this influence. The heart is not affected either by salicylic acid or sodium salicylates. Experiments made on animals with poisonous doses prove that this organ preserves its movements; even when the muscular fibre and the ganglia cease to perform their functions, *rigor cadaveris* sets in. It has also been demonstrated by experiments on the lower animals, that non-toxic doses act on the nerve-centres. M. Bochefontaine brings further evidence by testing the action of salicylic acid on himself. He took a daily dose of three grammes of salicylic acid, one-half at twelve o'clock, the other at night. Each time he repeated the dose, he was unable to walk from a feeling of fatigue. When sitting, this sensation disappeared, and a perfectly normal condition prevailed. M. Bochefontaine concludes that salicylic acid, in non-toxic doses, acts in man as in animals, on the medulla oblongata; and that the regulating effect on the respiratory system of typhoid patients is due to the action of salicylic acid on the respiratory centre of the medulla oblongata.

Aphasia Complicated with Chorea.

This complication is so rare that the following case, reported by Dr. J. B. Jackson in the *Medical Press*, September 10, 1884, is worthy of note:

On July 28th he was called to see Mrs. T. æt. 85. She stated that when she awoke on the previous morning she could not utter a single word, and remained in this condition for about five hours, when she found that the power of speech had suddenly returned. She then believed she was quite well again, but in the evening became very restless, and was so nervous and agitated on the following morning that her friends sent for

him. She related all the circumstances of her seizure very intelligibly, considering her great age, but omitted some words altogether, and only succeeded in pronouncing others after three or four attempts. She knew perfectly well that she was omitting those words, and became very much annoyed in consequence. Whilst he was with her she called out to her daughter, "Give me a—a—dear me, you know very well what I want." "A handkerchief?" said he. "Yes, a handkerchief." He noticed that she was constantly throwing her arms about, and when asked to shake hands, her arm was shot forward as if by a spring, and as quickly withdrawn. It was only after several failures that she succeeded in reaching his hand. These choreic movements were confined to the upper limbs, and were more strongly marked on the left side. She had had acute rheumatism when eleven years old. He considered the case to be aphasia complicated with chorea, and gave her a mixture of iron, arsenic, and strychnine. At the end of a week the aphasia had entirely disappeared, and the chorea is now (August 25) very much better, though not quite well yet.

A Peculiar Shaped Placenta Obstructing Labor.

Dr. William Baxter reports this instructive case in the *Lancet*, September 20, 1884:

Mrs. W., aged thirty-five, multipara, was confined on Sunday, September 7. The child was born at 4 p. m. and after waiting the usual time, "expression" of the placenta was tried, after Credé's method. The uterus was well contracted under the hand, but appeared somewhat enlarged. After adopting this procedure for about twenty minutes, and finding that the placenta was not expelled, a vaginal examination was made. The placenta was found well down in the vagina, the examining finger almost reaching its inner extremity. Gentle traction on the cord was now resorted to; and, finding this useless, after a while strong traction was made, but all to no purpose. Being puzzled at this prolonged retention in the vagina, a more thorough search for its cause was about being made, when the placenta was suddenly expelled, to be followed almost immediately by a supplementary one, to which it was attached by a fibrous cord about four inches long. On examination the first placenta was found to be very large, and of the "battledore" variety. The second or supplementary mass was rudimentary in structure, and appeared to be a quarter the size of the placenta proper. The fibrous band which connected them was pretty strong,

and on carefully examining it a vascular communication between the placenta was discovered running through its centre. This anomaly explained the retention of the placenta proper in the vagina, it being held there by its communication with the supplementary mass, which had not yet been expelled from the uterine cavity.

Some Varieties of Dyspnoea in Bright's Disease.

Dr. R. P. Howard read a paper on this subject before the last meeting of the Canada Medical Association, in which he reached the following conclusions:

1. That marked dyspnoea may occur in Bright's disease, not due to gross lesions in heart, lungs, or pleura.
2. That it may be (a) a continuous dyspnoea, or (b) paroxysmal in character, resembling spasmodic asthma; and (c) that these types may occur in the same case, but the continued variety is more frequent than the asthmatic.
3. That these forms of dyspnoea may occur as the prominent symptom of renal disease, and their origin may escape recognition if the urine be not carefully examined.
4. That the Cheyne-Stokes' respiration is often a symptom of Bright's disease, and that it obtains in both the acute parenchymatous and in the chronic interstitial nephritis.
5. That while the Cheyne-Stokes' breathing is usually an evidence that the fatal issue is near at hand, it may occur in a chronic form, and may recur for weeks, and, perhaps, even for years.
6. That these several forms of dyspnoea are due to that defective renal-elimination called uræmia.
7. That in the acute form of Bright's disease serious or fatal dyspnoea may sometimes occur in connection with effusion into the submucous membrane of the larynx—so called œdema glottidis.

The Ixodes, a Parasite but Little Known in the Human Body.

Before the late International Medical Congress, Dr. Raymond (Limoges) said that many species of ixodes attacked man and certain animals. The affections resulting from the stings of these arachnids were sometimes serious. They had not been studied with the attention they merited. These parasites were interesting to surgeons, hygienists, veterinarians, breeders of cattle, naturalists, administrators of the law, and heads of families. For instance, there was every reason to believe that the ixodes played an important part in the propagation of certain virulent affections as "charbon." They injured

oxen; and the forms of panic which sometimes occurred amongst a herd of cattle might be accounted for by the implantation of one of these ixodes on some delicate part of a cow or bull. At the Surgical Society of Paris on November 27th, 1867, an ixodes was presented, which had remained six months in the auditory canal of a soldier of the Mexican army. In the discussion which took place, so little was known of the history of this acarian, that almost all called it an insect. He had collected all the facts bearing on its natural history and pathology, so as to produce a monograph on the ixodes as a parasite of man and animals. Colored designs taken from nature, and drawn by the author, would be added to the descriptions and observations.

Lithotomy in a Female Child.

It is not customary for the average physician, or indeed for the best of us, to suspect a calculus in the bladder of a child of six. That they do exist, not infrequently, we have no doubt; hence the following case which Dr. J. G. Carpenter reports in the *St. Louis Courier of Medicine* is worthy of note as calling our attention to the matter:

The little girl, the history of whose case is detailed, had been, uselessly, a sufferer for three years, with pain in bladder, vulva, and rectum, during which time she had been unavailingly treated for cystitis and anemia. Although every symptom pointed to stone in the bladder, yet not one of the many physicians who attended had ever proposed to examine that organ nor did they suspect the presence of urinary calculus. There was difficult and frequent micturition, alternating with incontinence. Urethral lithotomy was performed and a perfect recovery ensued.

The Treatment of Diphtheria.

Before the late International Medical Congress Dr. Berleme Nix (Denmark), read a paper on the treatment of diphtheria. He maintained that diphtheria was a disease produced by a specific contagion. The disease was in the very beginning located in the throat. The organism caught the contagion from the false membrane. Against the false membrane the chief treatment is to be directed, paying all regard to the patient's state of health in general. It was of the greatest importance to begin the treatment as early as possible. Caustics were useless, astringent and solvent drugs ineffective. Medicine was of no use, except, in some cases, tonics and stimulants. The

treatment should be instrumental, and should combine isolation, strong food and stimulants, and fresh air; cleansing of the throat by gargles; syringing with disinfectants; removal of the false membrane by means of the sharp spoon, followed by cauterization of the scraped surface with solid nitrate of silver.

Oophorectomy as a Remedy Against Nervous and Mental Suffering.

Before the late International Medical Congress, Prof. Hegar (Freiburg) made some observations on castration in general, and particularly on its indications, and the reasons for this indication. He treated of the pathological and anatomical changes of the sexual organ for which castration should be proposed, and the neuroses in connection with these changes; and next pointed out the causality between the disease-process of the sexual organ and the neuroses, and examined the question under what conditions should castration be performed. The neuroses upon which the pathological processes of the sexual organ are dependent, were chiefly considered. He gave a formula of the indications, statistics on the results, and the reasons by which rightly to estimate the indication for operation. A neurosis without any material change of the sexual organ might exist. Was this an indication for castration? He concluded by referring to the connection between gynaecology and neuro-pathology.

The Heredity of Tuberculosis.

Before the late International Medical Congress, Professor Heller (Kiel) contributed a paper on this subject, in which he contested some of the views on the transference of tuberculosis through procreation to the fetus. He maintained that experimental proofs had not been sufficiently brought forward. Facts spoke more against than for heredity. Tuberculosis appeared but seldom in the fetus or in the newly-born during the first days of life; it could be seen towards the first month of extra-uterine life, rising rapidly in the proceeding months. Professor Heller asserted that hereditary transference was to be looked upon as the exception, post-uterine acquisition as the rule. He concluded by the demonstration of a case of confirmed tuberculosis in a woman, who died before her confinement, and who had a perfectly healthy fetus.

The Microbe of Syphilis.

MM. Marcus and Detournery, who are engaged on experiments to ascertain the persistence of the

microbe of syphilis, gives the following summary of their experiments, reserving a more complete statement for a future period. In syphilitic products and artificial cultivations, colonies of cocci are observed, easily colored by Gram's method; violet of gentian dissolved in water saturated with aniline; discoloration by a solution composed of 300 grammes of water, two grammes of potassium iodide, and one gramme of iodine. The rods originally observed by Birch-Hirschfeld and Martineau are present in very small numbers; they disappear after the third cultivation, and are killed by a mixture of acid and alcohol at 3 per 100. MM. Marcus and Detournery believe that these rods are due to septicæmia, or result from the juxtaposition of one or two cocci. The cocci are easily cultivated in peptonized beef broth, to which is added gelatine and an alkali.

Sunstroke and Thermic Fever.

Before the late International Medical Congress, Sir Joseph Fayrer, in a paper on this subject, divided it into three heads, which might be concisely stated as (1) syncope from exhaustion; (2) an analogous condition in which the respiratory centre was seriously implicated; (3) overheating of the whole body—thermic fever of great intensity. The general effects of heat in leading to impairment of health were also carefully dealt with. The treatment consisted in reducing the temperature of the body; but, in doing so, undue depression of the vital powers was to be avoided. The lesions of insolation and thermic fever were more or less enduring. Hence, care must be exercised in allowing those who had been affected by them to return to work in tropical countries. As a very general rule, they were permanently disqualified for occupation in hot climates.

Syphilis and Cholera.

Before a recent meeting of the Hospitals Medical Society of Paris, M. Martineau gave his views on this subject (*Med. Record*, October 4, 1884). It had been asserted that the mercury given in the treatment of syphilis, especially the biniodide of mercury, acted also as one of the best prophylactics against cholera. The speaker opposed this view, and stated that of nine fatal cases of cholera occurring during the epidemic of 1849 in the Hôpital de Lourcine, eight of the patients were under treatment for syphilis. A similar experience obtained in 1866. At that time two wards were devoted to the reception of cholera patients, but the disease spread throughout the hospital and attacked by preference the syphilitics.

An Instrument for Pencilling Children's Throats.

From the *Deutsche Med. Zeitung*, we learn that Dr. H. Guttman has devised an instrument to facilitate the making of local applications to the throat in dealing with refractory children. It consists simply of a wedge of hard rubber, with rounded edges, to the broad end of which is attached a handle. The wedge is perforated to permit the passage of the brush. By the use of this instrument it is claimed that the possibility of injury to the soft parts is done with, the diphtheritic throat may be pencilled with great ease, and lastly the danger of infection from coughed-up matters is avoided.

Anal Fissure Treated without Operation.

Operative procedure is usually considered necessary in the treatment of fissure of the anus; we are usually taught to stretch the sphincter. But since many persons object to even the slightest operation, it is well that we should know that Dr. John Thompson, of Albany, has succeeded in curing an acute case with the following suppositories:

R. Morphine sulph.,	gr. ss.
Ext. belladonnæ,	gr. j.
Ol. theobrom.,	q. s.
M. and W. unum suppositorium.	

One or two of such were used, as required, each day for seven weeks.

The Relation Between Scrofula and Tuberculosis.

Before the late International Medical Congress, Dr. J. Grancher (Paris) gave an elaborate history of the theories and discussions on the identity of the distinction of scrofula and tuberculosis. He had carried on numberless experiments, which he detailed. The conclusion he drew was that tubercle might exist in various degrees of virulence, some forms of which, as scrofulous secretions, were simply an attenuated form of tubercle. M. Grancher had failed to find characteristic bacilli in cases where, according to some theories, they should have been met with.

Treatment of Cold Abscesses by Injections of Iodoform.

Verneuil's method, as described by the *Revue de Thérap. Médico-Chir.*, consists in injecting into the cavity of the abscess, previously emptied by aspiration, of a 1 to 20 solution of iodoform in ether. The quantity of fluid injected may reach 300 grammes without causing any symptoms of poisoning. This method is said to give very satisfactory results, and to be quite free from danger the injections can be repeated if necessary.

SPECIAL REPORT.

PROGRESS OF OTOTOLOGY.

BY LAURENCE TURNBULL, M. D.,

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The following recent works have been received since our last paper* on this subject.

1. *Manual of Diseases of the Ear*. For the use of student and practitioners of medicine. By Thomas Barr, M. D., Surgeon to Glasgow Hospital for Diseases of the Ear. Glasgow, James Maclehose & Sons, May, 1884. Crown, 8vo., pp. 529, with 115 woodcuts in the text.

2. *Traite Theorique et Pratique des Maladies De l'Oreille et Du Nez*. Par C. Miot, Professeur d'Otologie et de Rhinologie, et J. Baratoux Professeur Libre d'Otologie et de Laryngologie Laureat de la Faculté de Médecine de Paris, Première et Deuxième Parties. Anatomie, Physiologie, Otoscopie et Rhinoscopie avec, 129 figures intercalées, Dan De Texte, Paris, June 1, 1884, Andrien Delahaye et Emil L. Krosner.

3. *Annales des Maladies de l'Oreille, du Larynx, et des Organes Connexes*. Par Le Dr. Ladriest De Lacherrière. Médecin en chef de l'institution nationale des Sourds-Muets et de Clinique Otologique, Nos. 2 et 3, May and July, 1884, Paris, G. Masson, Philadelphia, P. Blakiston Son et cie.

4. *Post-Nasal Catarrh and Diseases of the Nose Causing Deafness*. By Edward Woakes, M. D., Senior Aural Surgeon and Lecturer on Diseases of the Ear, London Hospital, with 29 woodcuts in the text. 8vo. pp. 224. Philadelphia, P. Blakiston Son & Co., 1012 Walnut street.

5. Mackenzie. *Diseases of the Oesophagus, Nasal Cavities, and Neck*. 8vo. P. Blakiston Son & Co., Philadelphia, 1884.

6. *A Few Remarks on Politzerization and a New Form of Politzer's Bag for Auto-Inflation of the Tympanum with Respired Air*. By H. M'Naughton Jones, M. D., etc., lately Surgeon to the Ophthalmic, Aural, and Throat Hospital, Cork; with woodcuts. British Medical Journal, May 3, p. 650.

7. *Irritation of the Sexual Apparatus as an Etiological Factor in the Production of Nasal Disease*. By John Mackenzie, M. D., Surgeon to the Baltimore Eye, Ear, and Throat Charity Hospital. From the American Journal of the Medical Sciences, April, 1884, pamphlet, pp. 22, reprint. Trans. Med. and Chir. Faculty, Maryland.

8. *Deflection of the Nasal Septum and Its Treatment*. Reprint Trans. Med. Society of Virginia, 1863.

9. By the same author, *Some Remarks on Naso-Aural Catarrh and Its Rational Treatment*. Pp. 22, 1883.

10. *The Galvano Caustic Method in Nose and Throat*. By J. C. Mulhall, M. D., Physician to the Throat and Lung Department, St. Louis Medical Dispensary. Reprint from St. Louis Courier of Medicine, July, 1884.

It will be noticed by those interested in the subject of otology and its teachers, that the medical gentleman whose work stands first on our list, has been elected and now fills the department of Aural Surgeon to the Glasgow Hospital, formerly so creditably occupied by our friend, the late Dr. James Patterson Cassells, (see obituary recently published*). It is the old idea, The king is dead; long live the king! It is one of the saddest things that those who pass away, no matter how distinguished they may be, their places are soon filled and they so soon, alas, forgotten.

The Manual of Diseases of the Ear by Dr. Thomas Barr, is dedicated to Sir Joseph Lister as one of his pupils, and it is creditable both to the author and the publisher. The object as stated by the author is to present the main facts of aural surgery, in a form sufficiently concise and methodical to meet the wants of general practitioners and students of medicine. His experience, gained as a teacher in the Glasgow Western Infirmary and Anderson College, has convinced him that the time the student can devote to diseases of the ear would be more profitably spent in pure clinical work than in attendance on systematic lectures. This is the correct idea, and one which, I am happy to state, is now carried out in all our post-graduate courses in this city. The plan of this manual is to devote more time and attention to the diseases of the middle ear, "The Examination of the Ear," "The Causes of Ear Disease." The affections of the nose and throat in their connection with diseases of the ear are taken up in a general way in introductory chapters. This arrangement obviates repetition. The remedies recommended for the various diseases are described as in the work of "Poltizer," in a list of formulæ at the end of the volume. There is a full index. The illustrations, though small, are well engraved and clearly printed on good paper. As a pupil of Lister, after reading the work, we naturally looked for a special chapter on the

* "Hemorrhages from the Ear," MEDICAL AND SURGICAL REPORTER, May 31, 1884.

* MEDICAL AND SURGICAL REPORTER, July 19, 1884, p. 84.

subject of the "Antiseptic Treatment of the Diseases of the Ear," which we found on page 360, under "Disinfection," the importance of it in chronic suppuration of the middle ear, but we were disappointed in finding no extended experiments on this important subject only the following statement, page 364, "The anatomical peculiarities of the middle ear do not admit of Lister's antiseptic method being carried out." On page 367 he again makes a strong statement without any experiments, as follows: "In certain cases, especially those characterized by persistently offensive smell, Politzer employs a spirituous solution of carbolic acid (f. 39)." This mode of treatment is very apt to be irritating, and is much inferior to the boracic acid treatment. *Iodoform* in the form of powder or solution is frequently employed. He has found it most valuable along with rectified spirits (f. 40).

"The Theoretical and Practical Treatise on the Diseases of the Ear and the Nose," by Drs. Miot and Baratoux, was issued in Paris, January, 1884. Dr. Miot is a well-recognized authority on diseases of the ear, having published "A Practical Treatise" on this subject, with numerous clinical observations, as early as July, 1871, pp. 464, with illustrations in the text and thirty-eight colored plates, also valuable monographs on "Myringodectomie," "Tenotomie du muscle tenseur du tympan," and "Considerations anatomique et physiologique sur la trompe d'Eustache." He has associated with him J. Baratoux, who has also published valuable monographs on "Pathogenie des affections de l'oreille," "De l'œsophagoscopie et de la gastroscopie," "De la perforations du tympani," "Des tumeurs adénoides," "De l'électrolyse on de la galvano-caustique, chimique de la d'eustache."

In associating Dr. Baratoux with him as an expert in laryngology he has increased the value of his work, for it has become necessary, in the advanced knowledge and treatment of the diseases of the ear, to give careful attention to the nose as a part of the Eustachian tube, and to the pharynx, which, in various forms of diseases of the middle ear, plays a very important part.

Chapters 1 to 3 are devoted to the Anatomy and Physiology of the Ear, while chapter 4 gives a careful statement of the Anatomy, Physiology, and Cavity of the Naso-Pharynx and Naso-Fossa, admirably illustrated with six large wood cuts; then follows chapter 5, Diseases of the Nose, trophic and reflex in their relations to the diseases of the ear. Chapter 6, Development of the Ear. Chapter 7, Mode of Making Autopsies of the Various

Parts, giving the method of Toynbee, Von Trötsch, Wendt, and a new method. He also describes the necropsy of the region of the ear and naso-pharynx, with the formula of liquids for preserving the parts for microscopical study, and he states the microscopy of the various parts of the ear.

The second part includes Otoscopy and Rhinoscopy, being illustrated with various instruments employed in France.

Chapter 1. The Ear Speculum. Chapter 2. The Illumination of the Ear. Chapter 3. Means of Passing Air and Vapors into the Ear. Chapter 4. Of Bougies, and the use of the Catheter. Chapter 5. Insufflations and Medicated Injections. Chapter 6. Anusculation of the Middle Ear. Chapter 7. The Exploration of the Internal Ear by Various Forms of Electricity, Static, Dynamic, and Faradic. Chapter 8. Rhinoscopy, Anterior and Posterior—Polyscope of Trouvè, and Photophore of Dr. Hélot. Chapter 9. Normal Appearance of the Ear and Nose, Nasal Cavity of the Pharynx, Eustachian Tube. Chapter 10. Examination of the Patient. Chapter 11. Various Forms of Deafness, with four tables for the examination of military recruits for deafness which may or not unfit them for active duty. A bibliography, commencing from 1562 to 1884, finishes the second part.

In conclusion, so far as our examination has gone, we consider this work the most complete and interesting that we have met with. The paper and the illustrations are remarkably good, and in every way creditable to the publishers.

The "Annales des Maladies de l'Oreille, du Larynx et des Organes Connexes," was founded in 1874, by Isambert and Krishaber, of Paris, deceased, and more recently by Ladrièr de Lacharrière, which is now enlarged, with an increased number of editors and co-laborators, French, English, and American, and is published every two months, each number in French, and a few articles in English. We regret that it is not of the same character as the "Archives of Otology," published in Germany and New York, in which every article is translated into English. Indeed, in No. 2 of the "Annales," the whole twenty-four articles are in French, and in No. 3 there are only two in English, one by Dr. M. Mackenzie, of London, and one by Dr. Woakes. Still, with these slight defects, which we trust will be remedied, it is an interesting and excellent journal, and published at fourteen francs. We translate two brief articles, which we consider contain some practical ideas.

A small new acoustic instrument for deaf persons, invented by Dr. Politzer, of Vienna.* The

principle on which this invention rests is one which has not yet been demonstrated in practical medicine; it is the following:

"It consists in carrying back to the membrane of the tympanum, by the aid of an elastic sound-conductor, the vibrations of the cartilage of the auricle. This little instrument is composed of a metal ring, thinner at the sides on which an India-rubber membrane is stretched. At the edge of the ring is fixed a narrow metal spring, the free end of which presses against the centre of the membrane and serves to stretch it. At the point of contact of the spring with the membrane, it makes a right angle at the inner part of the latter, two metal ends of which one attaches itself again to the longest part of the small tube, while the other serves to hold the shorter part, and carries back the longest by its contact with the auricle all the vibrations of this last; the tube is enclosed in the metallic ring, which is placed in the vestibule of the external auditory canal, and prevents all contact with this longer part of the small tube conductor, with the walls of the canal."

The trials with the aid of the new instrument of Dr. Politzer have been made on 140 deaf persons, and the following are the results which have been obtained by Dr. Wittelshoper:

Of the 140 patients, 86 persons were suffering with chronic catarrh affection of the middle ear, but not suppurating, the most of them without mucous secretions in the cavity of the tympanum. Of these 86 persons, 65 obtained a sensible amelioration of the hearing; in 24 of the cases, the amelioration had doubled the intensity of the auditory power, as far as then preserved. In the 41 others this improvement of the power of the auditive sense, manifested itself by the perception of the sound of speech, from a distance of one-half metre to one metre, and one and a half metres, to five, six, and seven metres of distance. In the 21 other cases there was not the least amelioration of the power of hearing; the long duration of the affection, and the examination of the auditory functions made the experimenter infer that there was an anchylosis of the ossicles of the ear, or a complication of certain diseases of the labyrinth.

A Case of Gummy Tumor of the Auricle. By Dr. Hessler (Halle).†

The cases of partial necrosis of the ear in con-

sequence of an ulcerated gummy tumor of the auricle are extremely rare, in proof of which we refer to the annals of medical science. Dr. Hessler has proved one of these cases in 1881, under the following circumstances:

The patient had a soft ulcer in the concave part of the right auricle. This ulcer suppurated some days, then closed and healed up of itself. Before the suppuration, the auricle was swollen and enlarged, and became a violent reddish-blue, and so painful that the patient was not able to lie down on that side to sleep.

At the time of the first examination of the affected part, the right auricle had that reddish-blue color, was swollen and glistening, of double the size of the left, and raised almost perpendicularly to the head. The large crease of the skin which we customarily see behind the auricle had completely disappeared, and the swelling of the mastoid process was such that we could no longer reach it. The skin in front and above the auricle was swollen and sensitive to the touch. On the anthelix and in front of the point of division in the "crura furcata" we found an ulcer about three millimetres in dimension. The edges and surface of it were yellow and viscous, and discharged a serous fluid equally yellow and fatty. The auditory canal was entirely uniform in all its extent, and yet so narrow that only a small speculum could be introduced, and thus obtain a view of the membrana tympani. The latter was in its normal condition, and the hearing in consequence was not modified.

At the first sight of the ulcer we believed it a syphilitic affection of the body, but the complete examination of the body, which bore no trace of it, did not confirm this diagnosis. The patient confessed to have had four years before an ulcer on the penis complicated with gonorrhœa, but he had been promptly cured by internal medication and local applications of external remedies, without any relapse. He had not observed since then any trace of exanthema on the surface of the body, nor mucous affections on the interior wall of the throat. Without doubt the use of iodide of potassium, with a simple local affection, has caused some suspicions to exist, but in the absence of it every trace was removed of syphilis. Convinced of it, we abstain from all specific treatment, the more so, as the medical annals have not shown any examples of gummy tumor of the auricle, without the presence of syphilitic symptoms in other parts of the body.

*Revue Medicale heb domadaire de Vienna du Dr. Wittelshoper, No. 22, 1884, Annales des Maladies de l'Oreille, du Larynx et des Organes Connexes.

†Archives für Ohrenkultunde, 20 vol, 4th part. Annales

des Maladies De l'Oreille, du Larynx et des Organes Connexes Juillet, 1884, No. 3, p. 192.

We were limited in consequence to treat the inflammation, by the application of cold compresses of a solution of acetate of lead, then we cauterized the ulcer with lunar caustic at an interval of five days. This ulceration soon disappeared without scar, and in like manner the tumor of the auricle. Some days later the patient presented himself with the ear in the same state as when at the first visit. The ulcer was even larger in size. A second treatment with the aid of incisions at the anterior part of the auricle, and by injection of 30 per cent. of carbolated solution accompanied with cauterization by lunar caustic, produced no better results in healing.

Baths were then tried (at Newenahr) from which he returned worse than before. After six months of treatment, there appeared on the right shin-bone a swelling of the size of a silver mark, tuberos and hard to the touch, not painful, and perfectly detached from the bone, produced without apparent or known cause, and after making an examination we soon agreed to the syphilitic origin. Then followed the treatment of iodide of potassium on good grounds. The affection and the tumor on the ear disappeared at the same time, which healed up, and the patient was completely restored.

We subsequently learned that two years before he had been treated a long time and without satisfactory results by the aid of compressing bandages for a chronic swelling of the articulations of the hands, which had not been attributed to syphilitic origin, with success by iodide of potassium for a gummy orchitis. The syphilitic cause of his ear affection could no longer be left in doubt. The case is remarkable for this circumstance—that this affection was produced without any other symptom or trace of syphilis, and even to the third degree of syphilitic affection. It is a demonstration in favor of the specific character of new local formations in the person affected by syphilis, and that it is necessary to treat from the first by an appropriate specific treatment.—A. Poltzer.

(To be continued.)

CORRESPONDENCE.

White Clover and the Salivation of Stock Thereby—Cause and Effect—Microbe of Cholera.

EDS. MED. AND SURG. REPORTER:

It is often a difficult matter to see the just relations of an effect to the cause, and sometimes well-nigh impossible to tell which is the cause and which the effect of a circumstance or phenomena of a circumstance; and when one is obliged to

take into the account an accompanying attendant of the cause and effect of a peculiar circumstance, it makes things quite complicated indeed.

I have been led to this communication by reading the discussions of late upon cholera, and its supposed cause, the microbe of Dr. Koch; and to further agitate the question, I thought I would bring up a familiar topic to us all.

This brings me to the point which I started out to call attention to. It has been an accepted theory in this neighborhood to attribute the salivation of horses to a very small red "midge" or "chigger" which the blossoms of white clover contain. It has been said time after time that white clover would not salivate a horse except when in bloom. I accepted that theory as probably right until the last week. According to the above insect theory the salivation was brought about this way. The blossoms contained the insects in abundance, and after being taken into the animal's mouth they would irritate the mucous membrane or lining of the mouth to such an extent that the animal would "slobber" the same as a man will when chewing strong tobacco that smarts his mouth.

Now, within about the last ten days the white clover in this region has sprung up in great abundance, for the fall rains have been recently copious and the weather very warm indeed for this time of the year, and there is not one blossom in a million plants of white clover, yet my horses have never been so badly affected in their lives with white clover as they are now at the present time, when there are no blossoms to contain the insects.

I consider the salivation due to an active principle residing in the plant itself, and not to an accompanying accidental insect in the blossoms. We know that yellow puccoon (*hydrastis canadensis*) will make the mouth water freely, as the botanical name implies, without the aid of any insect. We also know that pilocarpine, the active principle of jaborandi, will make the mouth pour out its saliva, and the pores of the skin exude perspiration too in abundance, and that is due, as every one believes, to the active principle in the plant.

The idea, though, that the salivation of animals, grazing on white clover, was owing to an insect in the blossom is akin, and probably as tenable and as near the truth as Dr. Koch's late theory of cholera being due to a microbe, a small living animal or vegetable spore, which is often found in the dejections of a cholera patient, when probably the fact is the microbe is only an accompanying attendant and not the cause at all of the cholera.

This is probably coupling the "sublime with the ridiculous," but I am after information, and would be very much obliged to any one who has any to impart on the above subject.

J. J. CONNER, M. D.

Palmer, Ill., Oct. 8, 1884.

Ingrowing Toe Nail.

EDS. MED. AND SURG. REPORTER:—

From time to time the surgical treatment of ingrowing toe-nails has been recommended in the various medical journals as the only expedient by which permanent relief can be obtained.

The editorial in the *REPORTER* (October 11) raises a note of warning and recalls the treatment given me while a student by Dr. A. Clark, of Beaver Dam, Wis., now of Detroit, Mich.

"Ingrowing toe-nail," according to the aged doctor, "was caused by paring the nail too closely. The pain would cause the sufferer to remove as much of the nail as possible, and, as nature wants everything nearly symmetrical, she would hasten the growth in the region of the excised part." He therefore advocated scraping the central portion of the nail very thin (as recommended in the *REPORTER*), and also paring the extremity of the nail in a crescentic shape, i. e., leaving the edges longer than the central portion. In this way the growth of the nail is directed toward the centre. Also the pressure on the edge of the nail would be in this manner distributed over a much larger cutaneous surface, hence is less liable to cut into the flesh. To palliate the suffering, the doctor inserted a little cotton under the sharp edges of the nail for the time being.

By the use of these simple expedients, he was enabled to successfully treat all mild and many aggravated cases of ingrowing toe-nail. I have used his treatment a number of times with success.

E. C. HELM, M. D.

Chicago, Ill.

Diagnosis and Treatment Given.

EDS. MED. AND SURG. REPORTER:

In answer to the article in issue for October 4, 1884, page 387, "Diagnosis and Treatment Wanted," I should think the case one of the nature of pododynia, described by Gross, vol. ii., p. 977, and treatment is, "Blisters, rest, and elevation of foot, and attention to diet and bowels."

This reminds me of an unique or uncommon case I met with, viz.: I was called August 9th at 9 p. m. to attend Mrs. H. P., and found her in a state of great nervous excitement, amounting to hysterical convulsions. She was crying, choking, and trying to vomit. Said she had tried to swallow three pills and they were all in her nose. Said she was afraid they would physic her eyes out of her head. I gave her an emetic that caused explosive emesis, and the pills came—one out of her mouth, one out of one nostril and the third pill out of the other. Immediately after came a sudden and instantaneous calm, and all was serene.

C. FULLER, M. D.

Lincoln, Maine.

NEWS AND MISCELLANY.

Micro-Organisms.

In view of the interest which attaches to micro-organisms at the present time, it will be interesting to read the following description of those which are exhibited at the International Health Exhibition, which we find reported in the *Brit. Med. Jour.*, September 20, 1883:

Bacillus Anthracis.—This bacillus varies from 5 to 20 μ in length, and 1 to 1.25 μ in breadth. It is quite motionless. When cultivated in suitable media, at the temperature of the body, the bacilli grow out into long threads, in which spores are

produced. They are readily cultivated in different media. When grown in gelatinized meat-infusion it becomes liquid, and delicate branching threads may be seen extending out into the still solid material. The smallest trace of such a cultivation inoculated into the body of an animal (mouse, rabbit, sheep, horse, sparrow, etc.,) causes death in twenty to forty-two or more hours, and the bacilli are found in great masses in the spleen, and abundantly in all the capillary vessels. This affection of animals is known as "splenic fever." In man, it is the cause of the "malignant pustule" and "wool-sorters' disease," the bacilli occurring abundantly in the affected part. (See Koch; Cohn's *Biologie der Pflanzen*, and *Mittheilungen aus dem Gesundheitsamte*.)

Bacillus of Typhoid Fever.—This is a small oval bacillus, which occurs constantly in great numbers in the ulcers of the intestinal wall at the acute stage of this disease. It also forms plugs in the liver and spleen. It may be cultivated out of the body on gelatinized meat-infusion and forms a fine brownish growth along the track of the inoculating needle, with little tendency to spread on the surface. Grown in this way, the bacilli are longer, and, when carefully stained, appear fusiform. Cultivated in the meat-infusion prepared with Japanese isinglass, at the temperature of the body, the bacilli have the shorter form, and are similar to those found in the body. In Japanese isinglass-infusion and blood-serum, they are said by Gaffky to form spores at this temperature. No animal has been found in which typhoid fever can be produced by inoculating the cultivation, so that it is not clearly proved that this bacillus is the cause of the disease. In the same way, the stools of typhoid fever patients, which are well known to contain the virus of the disease, do not communicate it to the lower animals. (See Gaffky, *Mittheilungen aus dem Gesundheitsamte*, vol. ii.)

Micrococcus of Acute Lobar Pneumonia.—This is a round or oval micrococcus, which occurs abundantly in the fluid from the lung, and in the sputa in most cases of this disease. Obtained from such a source, it is found to be invested with a hyaline capsule. It may be cultivated in gelatinized meat-infusion, and forms a very characteristic growth. Along the track of the needle the growth is moderately vigorous, but around the point at which the needle has entered the material, a large round button-shaped mass is found. This has given rise to the name "nail-cultivation," which has been applied to this growth. The micrococci from the cultivation are seen to have lost their hyaline investment. When a spray, formed of such a cultivation mixed with distilled water, is made to play into a cage containing a number of healthy mice, a certain proportion of them become affected with acute lobar pneumonia. The disease may also be induced by injecting the cultivation into the pleural cavity of a mouse or dog. The micrococci in the fluid from the lung are found to have regained their capsules. (See Friedlander, *Die Mikrokokken des Pneumonie*, *Fortschritte der Medicin*, No. 22, 1883.)

Micrococcus of Acute Osteomyelitis.—A small micrococcus is found abundantly in the pus in cases of this disease. It may be cultivated in gelatin-

ized meat-infusion, and causes it to become liquid, the micrococci sink to the bottom of the liquid part, forming a bright orange precipitate. It may also be cultivated on potatoes, where it forms an orange-yellow growth. When injected beneath the skin of a healthy rabbit, no special effect is produced, but if introduced into the veins of an animal whose bones have previously been injured, the characteristic features of acute osteomyelitis appear, and the micrococci are found abundantly in the pus which is formed. (See Becker, *Deutsche Medicinische Wochenschrift*, November 15, 1883.)

Bacillus of Tubercle.—This bacillus occurs in tubercular growths, the sputa of phthisical patients, and in serofulous glands and joints. It is a slender curved organism, which is frequently found in bundles, and often exhibits an appearance of spore-formation, with alternate light and dark staining bands. It may be cultivated out of the body by crushing out the contents of a tubercle on the surface of coagulated blood-serum (prepared as already described). If the tube is kept at the temperature of the body, dry white scaly growths appear, which slowly enlarge. These consist of masses of the bacilli, and when cultivated in another tube of serum, give rise to the same appearance. Inoculation of these growths into rabbits is followed by the appearance of tubercular processes, and similar results are obtained by causing the animal to inhale a spray formed from such a cultivation mixed with distilled water. When the surface of blood-serum on which the formation of colonies is in progress is examined microscopically, the bacilli are seen to be arranged in groups of a remarkably curved shape, with the individual rods lying more or less in a line with the long axis of the growth. (See Koch, *Mittheilungen des Gesundheitsamtes*.)

Micrococcus of Erysipelas.—In the pus found in this disease, and in the lymphatic vessels of the skin at the margin of a spreading patch, there are found abundantly small round micrococci arranged in pairs. These may be cultivated out of the body on gelatinized meat-infusion, where they grow slowly, forming small round colonies. It has been thought that an attack of erysipelas has a favorable influence on the course of certain malignant growths, and with this view the disease has been produced in men by inoculation about the affected part. For this purpose, the cultivations of the micrococci are quite as potent in setting up the attack as the pus of an erysipelatous patient. Erysipelas may also be produced in other animals by inoculation. (See Fehleisen, *Die Ätiologie des Erysipels*, Berlin, 1883.)

Spirillum of Relapsing Fever (spirochaete Obermeier).—This is an elongated serpentiform organism measuring some 16–40 μ in length. When living, it moves rapidly with an undulatory motion.

It usually occurs in very large numbers in the blood of persons suffering from relapsing fever during the onset of the attack; it is not, however, found in the intervals.

A drop of blood containing the spirilla, inoculated into a monkey, causes it to be affected with the fever.

Though the spirilla retain their vitality for some time in blood-serum, and in one-half per cent. salt solutions, they cannot be cultivated

outside the living body. (See papers by Obermeier, in *Med. Centrabl.*, 1873, 10, and Spirillum Fever, by Carter.)

The Cholera Bacillus.—This is a bracket-shaped bacterium about one-third the size of the bacillus of tubercle. It is doubtful whether it should be considered a spirillum or not. It is capable of active movement. It occurs in large numbers in the stools of persons suffering from Asiatic cholera, and in the walls of the diseased parts of the ileum close to the ileo-cæcal valve. It may be cultivated in gelatinized meat-infusion, but flourishes best in liquids such as meat-infusion, milk, etc.

The Bacillus of Malignant Œdema.—This is a bacillus, the breadth of which is about 1 μ , but the length varies considerably; on an average it is about 3 μ . The bacilli often occur in chains of two or more, and in long threads which may attain a length of 40 μ . The spores appear to be universally distributed, occurring in the dust of hay, in putrefying liquids, and in cultivated soil. When earth is introduced beneath the skin of a guinea-pig, it frequently happens that an extensive subcutaneous œdema is set up, with the formation of bubbles of gas and a clear red fluid. In the course of 24 to 48 hours, the animal dies; and if the body be examined immediately after death, the bacilli are found in the œdematous fluid at the seat of inoculation, and occasionally in the lymph-channels of the different organs, but not in the blood. In this respect, the bacillus contrasts strongly with that of anthrax, which occurs mainly in the blood. The injection of the œdematous fluid which contains bacilli beneath the skin of another animal again sets up the disease. The bacillus is one of those in which growth takes place in the absence of oxygen. Cultivation of the organism out of the body is difficult, but it has been accomplished by Gaffky, who introduced part of the liver of a guinea-pig, which had been killed in the manner above-described, into the interior of a potato, filling in the opening with potato substance. The growth so obtained was able to produce the disease. (See Gaffky, in the *Mittheilungen des Gesundheitsamtes*, vol. i.)

A Microcephalic Girl.

From a foreign exchange we learn that at a recent meeting of the Berlin Medical Society, Professor Virchow introduced a subject of considerable interest. It was a case of a girl, aged 14, with a slight, though normally developed figure, but with a diminutive head, scarcely as large as a man's fist. She came from Offenbach, and was introduced by her mother, a tall, large-boned woman. The following is a description of the appearance of the girl. Her face is not larger than that of a new-born child, with a sharply projecting nose and prominent jaws; her complexion is delicate, and her features resemble those of a bird of prey. The size of the brain in this diminutive skull is proportionately small, and the intellectual powers are not developed beyond those of a young child. The only word, besides some inarticulate sounds, that the girl can pronounce, is mamma. On perceiving the large assembly, and on having to submit to her head being felt and

measured by several of the members, she became cross and peevish, notwithstanding the kind encouragement she met with. Professor Virchow said that he had seen the girl for the first time ten years ago. He had recently examined her, and found that her body had considerably grown since then, and had developed quite normally; but the head, although a few centimetres larger, had remained microcephalous. The child's parents are tall, strong-boned, and quite normally built. Seven children have been born to them, and four of these children—the eldest, the fourth, the fifth, and the youngest—were microcephalous, while the other three were regularly developed. The girl presented to the meeting was the only one of the four microcephalous children that lived; the others were either born dead or only lived a short time. The eldest of the family that was normally developed, the one born after this child, was to have been introduced to the meeting, to be compared with her sister, but just before their intended departure together she became raving mad. This madness was brought on by the anxiety from which the whole district was suffering, on account of the floods in the neighborhood—a circumstance which Professor Virchow considered of great importance in the question of transmission. Professor Virchow also exhibited several specimens from his collection of skulls, for purposes of comparison, a normal skull of an aboriginal native of New Britain, and the skull of a microcephalous person from the province of Posen. That of the girl introduced at the meeting was smaller than this latter skull, and the girl herself was older than any previously known case. When she was at home she sat quietly, and preferred avoiding the society of other children, generally withdrawing into a corner of the room. She ate and drank purely mechanically. Her mental development did not exceed that of a six months' old child, and she could not be left to herself without supervision.

The Pennsylvania Hospital for the Insane.

The managers of the Pennsylvania Hospital announce that they have unanimously elected Dr. John B. Chapin (formerly in charge of the Willard Asylum, in New York) as Superintendent and Physician-in-Chief of the Male and Female Departments of their Hospital for the Insane, and successor in office of their lamented friend, Dr. Thomas S. Kirkbride, deceased.

Dr. Chapin has accepted the position and has assumed its duties. His large experience and his deservedly high reputation in the specialty to which he has devoted his professional life for more than twenty-five years (the last eighteen of which were occupied in the great work of organizing and administering the Willard Asylum with signal ability and success), give the strongest assurance to all who are interested in the Pennsylvania Hospital, and in the welfare of the patients committed to its care, that the best professional treatment of the insane, and the most solicitous efforts for their comfort and their cure, will be maintained by Dr. Chapin in the institution to which he has now been called.

All communications in reference to patients, either male or female, should be addressed to Dr.

John B. Chapin, Pennsylvania Hospital for the Insane, Haverford avenue and Forty-fourth street, Philadelphia.

Personal.

—Dr. J. L. Millikin, of Carmichaels, Pa., has removed to Greensboro, Pa., since the death of Dr. G. F. Birch, of the latter place.

Items.

—A sum of \$200,000 has been left to the University of Berlin by the late Countess Bose, of Cassel, for the benefit of poor medical students.

—A drachm of balsam of copaiba to an ounce of white vaseline makes an ointment popular with New York ophthalmologists, in treating chronic conjunctivitis.

—Dr. Wilson, of Louisville, has used with success the inner membrane of the hen's egg for skin grafting. One egg will supply an indefinite number of grafts.—*Columbus Medical Journal*.

—The poisonous character of urea when introduced into the tissues of animals, has been demonstrated experimentally by MM. Gréhaut and Quinquand. In rabbits the fatal dose is 661m. grms per 100 grms of blood.

—In his will, dated June 21, 1881, Dr. John G. Adams left five thousand dollars to the New York Academy of Medicine, but he afterwards added a codicil revoking this bequest on account of the action of the academy with reference to the new Code.

—A subscription has been opened at St. Petersburg, in order to raise funds for instituting at the University five bursaries in the name of Charles Darwin, to be employed for the maintenance of five students in the five chief branches of natural science.

—The mortality of the globe, as given by a Continental journal, which has made the computation, is as follows: Per minute, 67; per diem, 97,790; and per annum, 35,639,835; whereas the births are 36,792,000 per annum, 100,000 per diem, and 70 per minute.

—The *Medical Press and Circular* says that of the four hundred and ninety-eight members attending the late meeting of the British Medical Association, at Belfast, Dublin sent twenty-one members, and all Ireland eleven members. Ireland was not enthusiastic.

—The death is announced from Vienna of Hermann Zeissl, the distinguished syphilographer, and with him, says the *Allgemeine Wiener Medizinische Zeitung*, falls the last leaf of the celebrated trifolium—Hebra, Sigmund, and Zeissl, one of the principal ornaments of the medical faculty. The deceased was born in 1817, and entered the Vienna University as Mediziner in 1839.

—At Berlin, Prussia, the Minister of Instruction has been so impressed with the evidence bearing upon the evil effects of school life upon children in the higher grades that he has ordered a competent corps of ophthalmologists to make the required studies, extending over several years.

A report is to be made of the progress of the work every half year.

—E. Vial ("Les Mondes"), discussing the physiological part of iron in the animal organism, contends that the active principle in the arterial globules is potassium ferrate, which in contact with reducing agents is broken up into oxygen, hydrated ferric oxide, and anhydrous potassa. The latter compound, after saturating itself with carbon dioxide, conveys this body into the lungs.

—The Cartwright Prize of the College of Physicians and Surgeons of New York, consisting of \$500, will be awarded at the commencement of 1885 to the authors of the best medical essay upon any subject. The essays, which must contain the original investigation made by the writer, are to be sent in to the Prize Committee, of which Dr. R. W. Amidon, 18 West Twenty-first street, is chairman, before April 1, 1885.

—The *New England Med. Mo.* tells us that in the brain of a patient who died in one of the Vienna hospitals, was found after death an iron nail covered with rust, which to all appearances must have been there since early childhood. The man was about forty-five years of age, a book-binder, and always passed for intelligent. At irregular intervals he had had epileptic attacks, and post-epileptic mental phenomena while in the hospital.

—As the result of a series of experiments made by M. Rebulon on the physiological action of convallaria on the heart of warm-blooded animals, the following conclusions have been drawn: Convallaria acts primarily on the nervous system of the heart, and more especially on its intracardiac elements; the chief effects observed consisted in the slowing or arrest of the cardiac beats (*Lyon Medical*, Nos. 37 and 38). Several tracings illustrating the effects of the drug on the cardiac beats and blood-pressure are given in the paper by Rebulon.

—In the principal cities of the world the rates of mortality per week per 1,000 of the various populations, according to the latest official returns, were: Calcutta 25, Bombay 28, Madras 37, Paris 21, Geneva 14, Brussels 23, Amsterdam 24, Rotterdam 21, The Hague 28, Copenhagen 27, Stockholm 23, Christiania 26, St. Petersburg 23, Berlin 31, Hamburg 23, Dresden 22, Breslau 28, Munich 31, Vienna 21, Prague 29, Buda-Pesth 25, Rome 26, Naples 25, Turin 19, Venice 24, Madrid 30, Lisbon 31, New York 26, Brooklyn 22, Philadelphia 21, and Baltimore 19.

—A Prohibitionist calculates that the amount of liquor made and imported into the United States in 1882 would fill a canal ten feet deep, twenty feet wide, and seventy-six miles long. The money it represents would have built a \$1000 house for the family of every mechanic in the land; would have paid for 3664 steamships at \$250,000 a piece; would have purchased 336,400 farms of 100 acres each, or would have fed and clothed all the children in the States under five years of age for two years, allowing a dollar a week for each of 10,000,000 children. Instead of doing this, it has gone down American throats.

MARRIAGES.

LISLE—SCHOONOVER.—October 15, 1884, in Columbus, Ohio, by Rev. Core, Dr. John M. Lisle, of Maysville, O., and Mattie E. Schoonover, of Millinville, O.

AGNEW—HODGSON.—October 16, 1884, in this city, E. Agnew, M. D., and Mrs. Mary Irwin Hodgson.

DAVIS—STAGG.—September 24, 1884, in Rahway, N. J., by Rev. Wm. A. Gay, Francis A. Davis, M. D., of Spotswood, N. J., and Lizzie F. Stagg, of Rahway.

DURRETT—ELDER.—October, 1884, by Rev. A. Donaldson, D. D., Harry S. Durrett, M. D., of Airmount, Miss., and Miss Lizzie Elder, of Eldersridge, Pa.

FERGUSON—AUGHEY.—September 25, 1884, at the Presbyterian parsonage, Farmington, Ills., by Rev. John H. Aughey, assisted by Rev. A. R. Mathes, of Canton, Dr. J. W. Ferguson, of Congress, O., and Miss Anna Kate Aughey, eldest daughter of the officiating clergyman.

GRANT—SMOCK.—October 15, 1884, at Plainfield, N. J., by Rev. D. J. Yerkes, Frank S. Grant, M. D., and Ada M. Smock, both of New York.

HAMMOND—BERRY.—October 15, 1884, at Ridgefield, N. J., by Rev. Dr. A. B. Taylor, Dr. George Hammond, and Mary K., eldest daughter of the late Stephen Berry, of Rutherford, N. J. No cards.

LUDEM—DUSTIN.—October 7, 1884, by Rev. M. Dustin, D. D., at his residence, Dr. B. F. Ludlum, of Maineville, O., and Miss Mary E. Dustin, of Loveland, daughter of the officiating minister.

MARTIN—COWGILL.—October 14, 1884, in Dover, Del., by Rev. J. F. Stonecipher, Dr. James Martin, of Philadelphia, and Minnie Cowgill, of Dover.

MERRILL—HALE.—October 16, 1884, at St. Thomas's church, Fifth avenue and Fifty-third street, New York, by Rev. Dr. W. F. Morgan, Edwin F. Merrill, of Philadelphia, and Minnie Isley, youngest daughter of James Hale, of New York.

OGDEN—STANDISH.—October 22, 1884, by Rev. S. F. Grier, A. D. Ogden, M. D., of East Liverpool, O., and Miss Alice Standish, of Hancock county, W. Va.

SATTERTHWAITE—SIMPSON.—October 2, 1884, at Fallsington, Pa., by Mr. Ebenezer H. Mull, J. P., Dr. Joseph H. Satterthwaite, of Trenton, N. J., and Miss Lizzie B. Simpson, of Fallsington, Pa.

SAXTON—FARRAND.—October 22, 1884, at Christ church, Henrietta, Mich., by the rector, Rev. S. S. Chapin, Arthur Willmott Saxton, M. D., of Henrietta, and Ada Rebecca, daughter of the late Joseph S. Farrand, of Hudson, N. Y.

SCHURMAN—MUNRO.—October 1, 1884, in New York by Rev. Dr. Hall, assisted by Rev. Dr. Waters, Dr. J. G. Schurman, of Dalhousie College, Halifax, and Barbara Forrest, daughter of George Munro.

STONE—NICHOLS.—October 8, 1884, at the residence of the bride's parents, Beechwood, Yonkers-on-Hudson, by Rev. John Reid, William Coolidge Stone, M. D., of New York city, and Kate, youngest daughter of Edward A. Nichols.

THOMAS—MACDONALD.—October 9, 1884, at the residence of the bride's mother, West Philadelphia, by Rev. S. W. Thomas, Dr. N. Wiley Thomas, son of the officiating clergyman, and Miss Belle J. MacDonald, both of Philadelphia.

WEED—TURRELL.—October 15, 1884, at the residence of the bride's parents, South Orange, N. J., Edgar T. Weed, M. D., of New York, and Louisa Boudelot Turrell.

DEATHS.

COREY.—September 8, 1884, of Bright's disease, at West Point, Ill., V. B. Corey, M. D., in the 57th year of his age.

BANGS.—October, 10, 1884, in Brooklyn, Dr. James S. Bangs, aged 72 years.

CHURCH.—October 24, in New York, at his late residence, Allen S. Church, M. D., aged 62 years.

CONDIE.—October 22, 1884, in this city, Louisa F., relict of the late Dr. Francis Condie, M. D., in the 74th year of her age.

EDWARDS.—October 6, 1884, at Granby, Conn., George W. Edwards, M. D., aged 48 years.

ENSGIN.—October 25, 1884, in New York city, William H. Ensign, M. D., in the 51st year of his age.

FETTER.—October 2, 1884, in New York city, David F. Fetter, M. D.